

黄冈小状元



同步计算

天天练

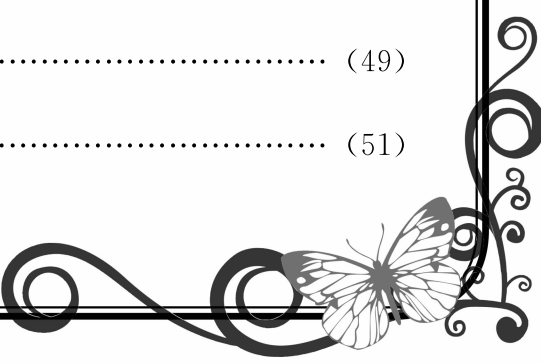




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一、负数

1. 算一算,填一填。

$$16 \div \frac{5}{4} \div \frac{8}{7}$$

$$= 16 \times \frac{4}{5} \times \frac{\square}{\square}$$

=

$$\left(\frac{4}{27} + \frac{5}{36}\right) \div \frac{5}{9}$$

$$= \frac{4}{27} \times \frac{9}{5} + \frac{5}{36} \times \frac{\square}{\square}$$

=

=

$$24 \times \frac{3}{4} \div \frac{6}{11}$$

$$= 24 \times \frac{3}{4} \times \frac{\square}{\square}$$

=

$$\frac{2}{3} \div \frac{5}{4} + \frac{13}{3} \div \frac{5}{4}$$

$$= \left(\frac{\square}{\square} + \frac{\square}{\square}\right) \times \frac{4}{5}$$

=

=

2. 计算下面各题。

$$\frac{5}{6} \div 10 + \frac{5}{6} \div 15$$

$$\frac{12}{17} \div 3 \times \frac{4}{5}$$

$$\left(\frac{1}{3} \times \frac{3}{4}\right) \div \left(\frac{1}{2} + \frac{2}{3}\right)$$

$$\left(\frac{1}{3} - \frac{1}{6}\right) \div 15$$

$$\left(40 - 35 \times \frac{2}{7}\right) \div \frac{10}{9}$$

$$\frac{4}{9} \div \frac{2}{3} \div \frac{5}{6}$$





二、百分数(二)

折扣

1. 算一算,填一填。

$$\text{九折} = \frac{(\quad 9 \quad)}{(\quad 10 \quad)} = (\quad 90 \quad)\%$$



九折表示十分之九



九折表示百分之九十

$$\text{八折} = (\quad) \% = \frac{(\quad)}{10}$$

$$(\quad) \text{折} = \frac{(\quad)}{10} = 70\%$$

$$\text{九五折} = (\quad) \% = \frac{(\quad)}{(\quad)}$$

$$\text{八八折} = (\quad) \% = \frac{(\quad)}{(\quad)}$$

2. 计算下面各题。

$$120 - 120 \times 80\%$$

$$= 120 - \boxed{}$$

=

$$150 \times (1 - 90\%)$$

$$= \boxed{} \times \boxed{}$$

=

$$2.4 \div (1 - 80\%)$$

=

$$(3200 - 2800) \div 3200$$

=

=

=

$$105 \times (1 - 88\%)$$

=

$$56 \div 80\% - 56$$

=

=

=

$$665 - 650 \times 20\%$$

=

$$6000 \times (1 - 80\%)$$

=

=

=





成数

1. 算一算,填一填。

$$\text{二成} = \left(\frac{2}{10}\right) = (20)\%$$

$$\text{四成} = \left(\frac{\quad}{10}\right) = (\quad)\%$$

$$\text{二成三} = \left(\frac{\quad}{\quad}\right) = (\quad)\%$$

$$\text{一成五} = \left(\frac{\quad}{\quad}\right) = (\quad)\%$$

$$\text{一成四} = \left(\frac{\quad}{\quad}\right) = (\quad)\%$$

几成表示一个数是另一个数的十分之几。



2. 计算下面各题。

$$1500 \times (1 + 20\%)$$

$$= 1500 \times \boxed{\quad}$$

=

$$650 + 650 \times 15\%$$

=

=

$$14000 \times (1 - 30\%)$$

=

=

$$(270 - 240) \div 240$$

=

=

$$1500 \div (1 - 20\%)$$

$$= 1500 \div \boxed{\quad}$$

=

$$820 - 820 \times 25\%$$

=

=

$$130 \div (1 + 30\%)$$

=

=

$$270 \div 240 - 1$$

=

=





税率

计算下面各题。

$$200 - 200 \times 5\%$$

$$= 200 - \boxed{}$$

$$=$$

$$1200 - 1200 \times 5\%$$

$$=$$
$$=$$

$$(4500 - 3500) \times 20\%$$

$$=$$
$$=$$

$$4800 \times (1 - 10\%)$$

$$=$$
$$=$$

$$4500 \div (1 - 25\%)$$

$$=$$
$$=$$

$$280 \times 5\% + 280 \times 1.5\%$$

$$=$$
$$=$$

$$300000 \times (1 - 8\%)$$

$$= 300000 \times \boxed{}$$

$$=$$

$$800 \times (1 - 15\%)$$

$$=$$
$$=$$

$$20000 \times 95\% \times 1.5\%$$

$$=$$
$$=$$

$$450 \times 0.6 \times 85\%$$

$$=$$
$$=$$

$$(4800 - 3500) \times 20\%$$

$$=$$
$$=$$

$$4000 \times (1 - 5\% - 1.5\%)$$

$$=$$
$$=$$




利率

1. 算一算,填一填。

$$4000 + 4000 \times 4.75\% \times 3$$

$$= 4000 + \boxed{}$$

$$= \boxed{}$$

$$4000 \times (1 + 4.75\% \times 3)$$

$$= 4000 \times \boxed{}$$

$$= \boxed{}$$

$$20000 \times 2.6\% \times \frac{1}{4}$$

$$= \boxed{} \times \boxed{} \times \boxed{}$$

$$= \boxed{}$$

$$5000 \times 0.35\% \times \frac{1}{10}$$

$$= \boxed{} \times \boxed{} \times \boxed{}$$

$$= \boxed{}$$

2. 计算下面各题。

$$10000 + 10000 \times 3.75\% \times 2$$

$$1000 \times (1 + 3\%) \times (1 + 3\%)$$

$$500 \times 2.42\% \times 2$$

$$2000 \times (1 + 4.75\% \times 5)$$

$$8000 \times 4.75\% \times 5$$

$$6000 \times 2.8\% \times \frac{1}{2} + 6000$$





练习(1)

1. 算一算,填一填。

$$\text{六五折} = \frac{(\quad)}{(\quad)} = (\quad)\%$$

$$(\quad) \div 500 = 38\%$$

$$\text{三成二} = \frac{(\quad)}{(\quad)} = (\quad)\%$$

$$50 \div (\quad) = 25\%$$

2. 计算下面各题。

$$280 - 20 \times 2$$

$$280 \times 90\% \times 95\%$$

$$1786 \div (1 - 6\%)$$

$$(5200 - 800) \times 20\%$$

$$2000 \times 3.75\% \times 2$$

$$1020 \div 85\% - 1020$$

$$20000 \times (1 + 4.3\%) \times (1 + 4.3\%)$$

$$800 \times (1 + 3.75\% \times 2)$$





练习(2)

计算下面各题。

$$45 \times \left(1 - \frac{1}{3}\right) \times (1 - 20\%)$$

$$(320 - 200) \div 320 \times 100\%$$

$$80 \times \left(75\% + \frac{1}{2}\right)$$

$$\left(\frac{1}{2} + \frac{2}{3}\right) \times 50\%$$

$$10000 \times (30\% - 10\%)$$

$$408 \div (1 - 15\%)$$

$$4000 \times (1 + 20\%) \times (1 - 25\%)$$

$$3200 \div 40\% \times 15\%$$

$$450 \div (1 + 80\%) \times \frac{5}{8}$$

$$(3800 - 800) \times 14\%$$



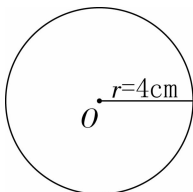


三、圆柱与圆锥

1. 圆柱

圆柱的认识

1. 求下面各圆的周长与面积。



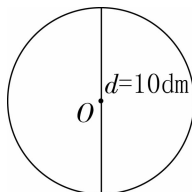
$$C=2\pi r$$

$$=2 \times 3.14 \times \boxed{}$$

$$=$$

$$S=3.14 \times 4^2$$

$$=3.14 \times \boxed{}$$

$$=$$


$$C=\pi d$$

$$=3.14 \times \boxed{}$$

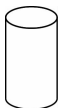
$$=$$

$$S=3.14 \times (10 \div 2)^2$$

$$=3.14 \times \boxed{}^2$$

$$=$$

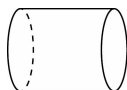
2. 根据下面条件,求下面圆柱的底面积和底面周长。



$$d=0.6\text{cm}$$

$$S=$$

$$C=$$



$$r=6\text{m}$$

$$S=$$

$$C=$$

3. 把下面的表格填写完整。

半径(r)	直径(d)	周长(C)	面积(S)
2cm			
	6dm		
		25.12cm	
0.5m			



每天一得 计算圆柱的底面周长用公式 $C=\pi d$ 或 $C=2\pi r$;
 计算圆柱的底面积用公式 $S=\pi r^2$ 或 $S=\pi(d \div 2)^2$ 。



1. 圆柱

圆柱的表面积(1)

1. 计算圆柱的表面积。(单位:cm)

$$(1) r=5 \quad h=12$$

$$S_{\text{侧}} = 2\pi rh$$

$$= 2 \times 3.14 \times \square \times \square$$

$$= 3.14 \times \square$$

$$= \square$$

$$S_{\text{底}} = \pi r^2$$

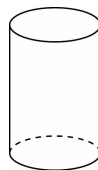
$$= 3.14 \times \square$$

$$= \square$$

$$S_{\text{表}} = S_{\text{侧}} + 2S_{\text{底}}$$

$$= \square + \square \times 2$$

$$= \square$$

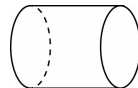


$$(2) r=3 \quad h=4$$

$$S_{\text{侧}} = 2 \times 3.14 \times 3 \times 4$$

$$S_{\text{底}} = 3.14 \times 3^2$$

$$S_{\text{表}} = S_{\text{侧}} + 2S_{\text{底}}$$



2. 计算下面各题。

$$2 \times 3.14 \times 5 \times 8 + 3.14 \times 5^2 \times 2$$

$$= 3.14 \times \square + 3.14 \times \square$$

$$= 3.14 \times \square$$

=

$$3.14 \times 8 \times 5 + 3.14 \times (8 \div 2)^2$$

$$= 3.14 \times \square + 3.14 \times \square$$

$$= 3.14 \times \square$$

=

$$18.84 \times 5 + 3.14 \times (18.84 \div 3.14 \div 2)^2$$

$$3.14 \times 0.5^2 \times 4$$

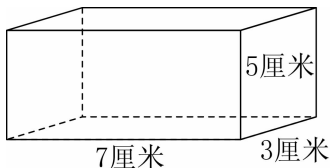




1. 圆柱

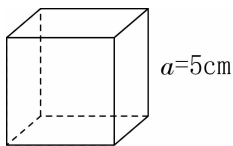
圆柱的表面积(2)

计算下面图形的表面积。



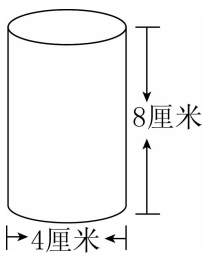
$$S_{\text{表}} = (ab + ah + bh) \times 2$$

$$=$$



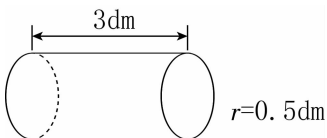
$$S_{\text{表}} = 6 \times a^2$$

$$=$$



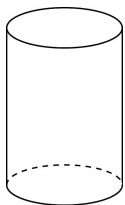
$$S_{\text{表}} = S_{\text{侧}} + 2S_{\text{底}}$$

$$=$$



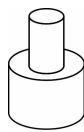
$$S_{\text{表}} = S_{\text{侧}} + 2S_{\text{底}}$$

$$=$$



$$C_{\text{底}} = 12.56\text{cm}$$

$$h = 10\text{cm}$$



两个圆柱的高都是 6cm,
小圆柱底面直径 4cm,
大圆柱底面半径 4cm。





1. 圆柱

圆柱的体积(1)

1. 计算下面圆柱的体积。

$$(1) S_{\text{底}} = 16\text{cm}^2 \quad h = 15\text{cm}$$

$$V_{\text{圆柱}} = Sh$$

=

=

$$(2) r = 15\text{cm} \quad h = 20\text{cm}$$

$$V_{\text{圆柱}} = \pi r^2 h$$

$$= 3.14 \times 15^2 \times 20$$

$$= 3.14 \times \boxed{}$$

=

$$(3) d = 8\text{dm} \quad h = 12\text{dm}$$

$$V_{\text{圆柱}} = \pi (d \div 2)^2 h$$

$$= 3.14 \times (8 \div 2)^2 \times 12$$

$$= 3.14 \times \boxed{}$$

=

$$(4) d = 6\text{m} \quad h = 6\text{m}$$

$$V_{\text{圆柱}} = \pi (d \div 2)^2 h$$

$$= 3.14 \times (6 \div 2)^2 \times 6$$

$$= 3.14 \times \boxed{}$$

=

2. 计算下面各题。

$$3.14 \times 4^2 \times 4.5$$

$$3.14 \times (16 \div 2)^2 \times 4$$

$$3.14 \times (8 \div 2)^2 \times 5$$

$$3.14 \times (3 \div 2)^2 \times 0.5 \times 2$$

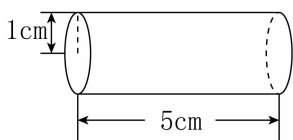




1. 圆柱

圆柱的体积(2)

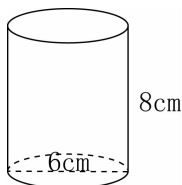
1. 计算下面图形的体积。



$$V_{\text{圆柱}} = \pi r^2 h$$

$$= 3.14 \times \boxed{} \times \boxed{}$$

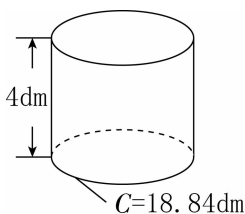
=



$$V_{\text{圆柱}} = \pi (d \div 2)^2 h$$

$$= 3.14 \times (\boxed{} \div 2)^2 \times \boxed{}$$

=



$$r = C \div \pi \div 2$$

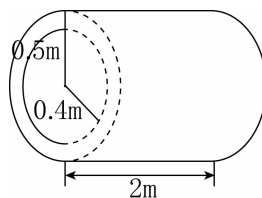
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=

$$V_{\text{圆柱}} = \pi r^2 h$$

=

=



$$S_{\text{底}} = \pi (R^2 - r^2)$$

=

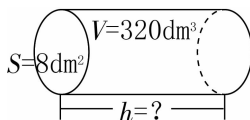
=

$$V_{\text{圆柱}} = Sh$$

=

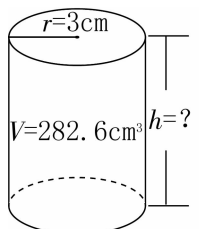
=

2. 计算下面圆柱的高。



$$h = V \div S$$

=



$$h = V \div (\pi r^2)$$

=



12

每天一得 圆柱的底面半径不变,高扩大到原来的 a 倍,体积也扩大到原来的 a 倍。



1. 圆柱

圆柱的体积(3)

1. 把下面的表格填写完整。

名称	半径 r	直径 d	底面周长 C	高 h	表面积 S	体积 V
圆柱	1cm			5cm		
		6cm		1cm		
			12.56m	3m		
	$\frac{1}{2}$ dm			4dm		

2. 根据条件计算圆柱的高。

$$(1) V_{\text{圆柱}} = 300 \text{dm}^3 \quad S_{\text{底}} = 16 \text{dm}^2$$

$$h = V \div S = 300 \div 16$$

=

$$(2) V_{\text{圆柱}} = 282.6 \text{cm}^3 \quad r = 3 \text{cm}$$

$$h = V \div (\pi r^2)$$

$$= \boxed{} \div (3.14 \times \boxed{})$$

=

$$(3) V_{\text{圆柱}} = 37.68 \text{cm}^3 \quad d = 4 \text{cm}$$

$$h = V \div [\pi (d \div 2)^2]$$

=

=

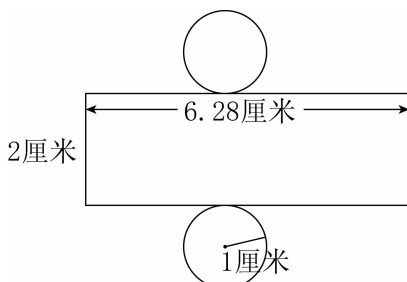
$$(4) S_{\text{侧}} = 94.2 \text{cm}^2 \quad r = 3 \text{cm}$$

$$h = S_{\text{侧}} \div (2\pi r)$$

=

=

3. 计算下面图形围成的圆柱的体积。



$V =$

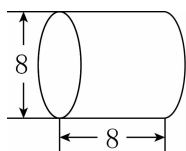




1. 圆柱

圆柱的体积(4)

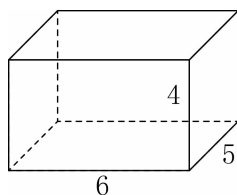
1. 计算下面各图形的体积。(单位:厘米)



$$V = \pi(d \div 2)^2 h$$

=

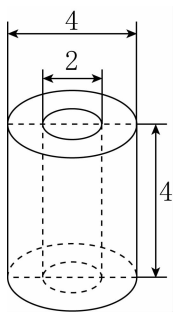
=



$$V = a \times b \times h$$

=

=



算法一:

$$V = V_{\text{外圆柱}} - V_{\text{内圆柱}}$$

$$= \pi(d_{\text{外}} \div 2)^2 h - \pi(d_{\text{内}} \div 2)^2 h$$

=

=

=

算法二:

$$V = Sh$$

$$= \pi(R^2 - r^2)h$$

=

=

2. 计算下面各题。

$$3.14 \times 3^2 \times 12 + 3.14 \times 3^2 \times 8$$

$$3.14 \times 3^2 \times 10 \times 4$$

$$45 \div 1.8 \times 2.3$$

$$502.4 \div (3.14 \times 4^2)$$

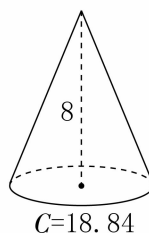
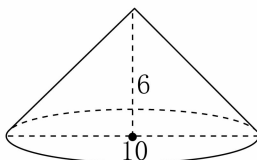
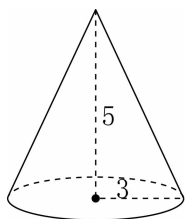




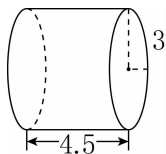
2. 圆锥

圆锥的认识

1. 计算下面各圆锥的底面积。(单位:cm)



2. 计算下面图形的表面积与体积。(单位:厘米)



$$S_{\text{表面积}} = S_{\text{侧面积}} + 2S_{\text{底面积}}$$

=

=

=

$$V = S_{\text{底面积}} \times h$$

=

=

=

3. 根据条件,求圆柱的高。

$$(1) V = 260 \text{ cm}^3 \quad S_{\text{底面积}} = 40 \text{ cm}^2$$

$$(2) V = 251.2 \text{ cm}^3 \quad r = 2 \text{ cm}$$





2. 圆锥

圆锥的体积(1)

1. 计算圆锥的体积。

$$(1) S_{\text{底}} = 150\text{cm}^2 \quad h = 27\text{cm}$$

$$V_{\text{圆锥}} = \frac{1}{3}Sh$$

$$= \frac{1}{3} \times 150 \times 27$$

=

$$(2) r = 6\text{cm} \quad h = 9\text{cm}$$

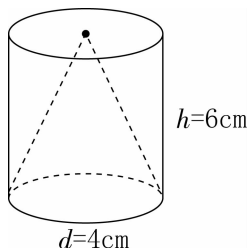
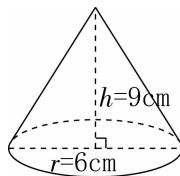
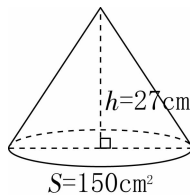
$$V_{\text{圆锥}} = \frac{1}{3}\pi r^2 h$$

$$= \frac{1}{3} \times 3.14 \times 6^2 \times 9$$

=

$$(3) d = 4\text{cm} \quad h = 6\text{cm}$$

$$V_{\text{圆锥}} =$$



2. 计算下面各题。

$$\frac{1}{3} \times 3.14 \times 10 \times 10 \times 15$$

$$\frac{1}{3} \times 3.14 \times (10 \div 2)^2 \times 12$$

$$\frac{1}{3} \times 3.14 \times 27 \times 5$$

$$\frac{1}{3} \times 3.14 \times \left(\frac{6}{2}\right)^2 \times 1.5$$





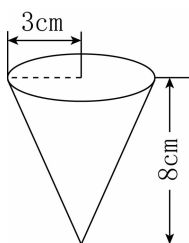
2. 圆锥

圆锥的体积(2)

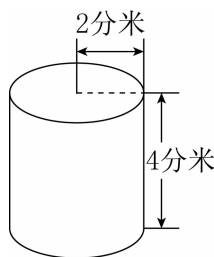
1. 算一算,填一填。

名称	半径 r	直径 d	高 h	表面积 S	体积 V
圆柱		10cm	3cm		
	0.2m		0.5m		
圆锥		6dm	5dm	—	
	$\frac{1}{2}$ m		2.4m	—	

2. 计算下面图形的体积。

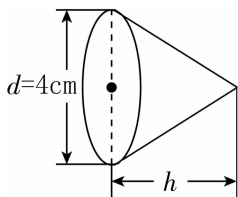


$$V_{\text{圆锥}} = \frac{1}{3} \pi r^2 h$$



$$V_{\text{圆柱}} = \pi r^2 h$$

3. 根据条件,计算圆锥的高。



$$V_{\text{圆锥}} = 12.56 \text{ cm}^3$$





参考答案

第 1 页

$$1. \quad 16 \div \frac{5}{4} \div \frac{8}{7} \quad 24 \times \frac{3}{4} \div \frac{6}{11}$$

$$= 16 \times \frac{4}{5} \times \frac{7}{8} = 24 \times \frac{3}{4} \times \frac{11}{6}$$

$$= 11 \frac{1}{5} \quad = 33$$

$$\left(\frac{4}{27} + \frac{5}{36} \right) \div \frac{5}{9}$$

$$= \frac{4}{27} \times \frac{9}{5} + \frac{5}{36} \times \frac{9}{5}$$

$$= \frac{4}{15} + \frac{1}{4}$$

$$= \frac{31}{60}$$

$$\frac{2}{3} \div \frac{5}{4} + \frac{13}{3} \div \frac{5}{4}$$

$$= \left(\frac{2}{3} + \frac{13}{3} \right) \times \frac{4}{5}$$

$$= 5 \times \frac{4}{5}$$

$$= 4$$

$$2. \quad \frac{5}{6} \div 10 + \frac{5}{6} \div 15$$

$$= \frac{5}{6} \times \left(\frac{1}{10} + \frac{1}{15} \right)$$

$$= \frac{5}{6} \times \frac{1}{6}$$

$$= \frac{5}{36}$$

$$\frac{12}{17} \div 3 \times \frac{4}{5}$$

$$= \frac{12}{17} \times \frac{1}{3} \times \frac{4}{5}$$

$$= \frac{16}{85}$$

$$\left(\frac{1}{3} \times \frac{3}{4} \right) \div \left(\frac{1}{2} + \frac{2}{3} \right)$$

$$= \frac{1}{4} \times \frac{6}{7}$$

$$= \frac{3}{14}$$

$$\left(\frac{1}{3} - \frac{1}{6} \right) \div 15$$

$$= \frac{1}{6} \times \frac{1}{15}$$

$$= \frac{1}{90}$$

$$\left(40 - 35 \times \frac{2}{7} \right) \div \frac{10}{9}$$

$$= (40 - 10) \times \frac{9}{10}$$

$$= 30 \times \frac{9}{10}$$

$$= 27$$

$$\frac{4}{9} \div \frac{2}{3} \div \frac{5}{6}$$

$$= \frac{4}{9} \times \frac{3}{2} \times \frac{6}{5}$$

$$= \frac{4}{5}$$

第 2 页

$$1. \quad \text{八折} = 80\% = \frac{8}{10}$$

$$\text{七折} = \frac{7}{10} = 70\%$$

$$\text{九五折} = 95\% = \frac{9.5}{10}$$

$$\text{八八折} = 88\% = \frac{8.8}{10}$$

$$2. \quad 120 - 120 \times 80\%$$

$$= 120 - 96$$

$$= 24$$

$$150 \times (1 - 90\%)$$

$$= 150 \times 0.1$$

$$= 15$$

$$2.4 \div (1 - 80\%)$$

$$= 2.4 \div 0.2$$

$$= 12$$

$$(3200 - 2800) \div 3200$$

$$= 400 \div 3200$$

$$= 0.125$$

$$105 \times (1 - 88\%)$$

$$= 105 \times 0.12$$

$$= 12.6$$

$$56 \div 80\% - 56$$

$$= 70 - 56$$

$$= 14$$

$$665 - 650 \times 20\%$$

$$= 665 - 130$$

$$= 535$$

$$6000 \times (1 - 80\%)$$

$$= 6000 \times 0.2$$

$$= 1200$$

第 3 页

$$1. \quad \text{四成} = \frac{4}{10} = 40\%$$

$$\text{二成三} = \frac{2.3}{10} = 23\%$$

$$\text{一成五} = \frac{1.5}{10} = 15\%$$

$$\text{一成四} = \frac{1.4}{10} = 14\%$$

$$2. \quad 1500 \times (1 + 20\%)$$

$$= 1500 \times 1.2$$

$$= 1800$$

$$1500 \div (1 - 20\%)$$

$$= 1500 \div 0.8$$

$$= 1875$$

$$650 + 650 \times 15\%$$

$$= 650 + 97.5$$

$$= 747.5$$

$$820 - 820 \times 25\%$$

$$= 820 - 205$$

$$= 615$$

$$14000 \times (1 - 30\%)$$

$$= 14000 \times 0.7$$

$$= 9800$$

$$130 \div (1 + 30\%)$$

$$= 130 \div 1.3$$

$$= 100$$

$$(270 - 240) \div 240$$

$$= 30 \div 240$$

$$= 0.125$$

$$270 \div 240 - 1$$

$$= 1.125 - 1$$

$$= 0.125$$

第 4 页

$$200 - 200 \times 5\%$$

$$= 200 - 10$$

$$= 190$$

$$300000 \times (1 - 8\%)$$

$$= 300000 \times 0.92$$

$$= 276000$$

$$1200 - 1200 \times 5\%$$

$$= 1200 - 60$$

$$= 1140$$

$$800 \times (1 - 15\%)$$

$$= 800 \times 0.85$$

$$= 680$$

$$(4500 - 3500) \times 20\%$$

$$= 1000 \times 20\%$$

$$= 200$$

$$20000 \times 95\% \times 1.5\%$$

$$= 20000 \times 0.95 \times 0.015$$

$$= 285$$

$$4800 \times (1 - 10\%)$$

$$= 4800 \times 0.9$$

$$= 4320$$

$$450 \times 0.6 \times 85\%$$

$$= 450 \times 0.6 \times 0.85$$

$$= 229.5$$

$$4500 \div (1 - 25\%)$$

$$= 4500 \div 0.75$$

$$= 6000$$

$$(4800 - 3500) \times 20\%$$

$$= 1300 \times 0.2$$

$$= 260$$

$$280 \times 5\% + 280 \times 1.5\%$$

$$= 14 + 4.2$$

$$= 18.2$$

$$4000 \times (1 - 5\% - 1.5\%)$$

$$= 4000 \times 0.935$$

$$= 3740$$

第 5 页

$$1. \quad 4000 + 4000 \times 4.75\% \times 3$$

$$= 4000 + 570$$

$$= 4570$$

$$4000 \times (1 + 4.75\% \times 3)$$

$$= 4000 \times 1.1425$$

$$= 4570$$

$$20000 \times 2.6\% \times \frac{1}{4}$$

$$= 20000 \times 0.026 \times 0.25$$

$$= 130$$

$$5000 \times 0.35\% \times \frac{1}{10}$$

$$= 5000 \times 0.0035 \times 0.1$$

$$= 1.75$$





$$\begin{aligned}
 2. \quad & 10000 + 10000 \times 3.75\% \times 2 \\
 & = 10000 + 750 \\
 & = 10750 \\
 & 1000 \times (1 + 3\%) \times (1 + 3\%) \\
 & = 1000 \times 1.03 \times 1.03 \\
 & = 1060.9 \\
 & 500 \times 2.42\% \times 2 \\
 & = 500 \times 2 \times 0.0242 \\
 & = 24.2 \\
 & 2000 \times (1 + 4.75\% \times 5) \\
 & = 2000 \times 1.2375 \\
 & = 2475 \\
 & 8000 \times 4.75\% \times 5 \\
 & = 8000 \times 0.0475 \times 5 \\
 & = 1900 \\
 & 6000 \times 2.8\% \times \frac{1}{2} + 6000 \\
 & = 84 + 6000 \\
 & = 6084
 \end{aligned}$$

第6页

$$\begin{aligned}
 1. \quad & \text{六五折} = \frac{6.5}{10} = 65\% \\
 & 190 \div 500 = 38\% \\
 & \text{三成二} = \frac{3.2}{10} = 32\%
 \end{aligned}$$

$$\begin{aligned}
 2. \quad & 50 \div 200 = 25\% \\
 & 280 - 20 \times 2 \\
 & = 280 - 40 \\
 & = 240 \\
 & 280 \times 90\% \times 95\% \\
 & = 280 \times 0.9 \times 0.95 \\
 & = 239.4 \\
 & 1786 \div (1 - 6\%) \\
 & = 1786 \div 0.94 \\
 & = 1900 \\
 & (5200 - 800) \times 20\% \\
 & = 4400 \times 0.2 \\
 & = 880 \\
 & 2000 \times 3.75\% \times 2 \\
 & = 2000 \times 0.0375 \times 2 \\
 & = 150 \\
 & 1020 \div 85\% - 1020 \\
 & = 1200 - 1020 \\
 & = 180 \\
 & 20000 \times (1 + 4.3\%) \times \\
 & \quad (1 + 4.3\%) \\
 & = 20000 \times 1.043 \times 1.043 \\
 & = 21756.98 \\
 & 800 \times (1 + 3.75\% \times 2) \\
 & = 800 \times 1.075 \\
 & = 860
 \end{aligned}$$

第7页

$$\begin{aligned}
 & 45 \times \left(1 - \frac{1}{3}\right) \times (1 - 20\%) \\
 & = 45 \times \frac{2}{3} \times \frac{4}{5} \\
 & = 24 \\
 & (320 - 200) \div 320 \times 100\% \\
 & = 120 \div 320 \times 100\% \\
 & = 37.5\%
 \end{aligned}$$

$$\begin{aligned}
 & 80 \times \left(75\% + \frac{1}{2}\right) \\
 & = 80 \times 1.25 \\
 & = 100
 \end{aligned}$$

$$\begin{aligned}
 & \left(\frac{1}{2} + \frac{2}{3}\right) \times 50\% \\
 & = \frac{7}{6} \times \frac{1}{2} \\
 & = \frac{7}{12} \\
 & 10000 \times (30\% - 10\%) \\
 & = 10000 \times 0.2 \\
 & = 2000 \\
 & 408 \div (1 - 15\%) \\
 & = 408 \div 0.85 \\
 & = 480 \\
 & 4000 \times (1 + 20\%) \times (1 - 25\%) \\
 & = 4000 \times 1.2 \times 0.75 \\
 & = 3600 \\
 & 3200 \div 40\% \times 15\% \\
 & = 3200 \div 0.4 \times 0.15 \\
 & = 1200 \\
 & 450 \div (1 + 80\%) \times \frac{5}{8} \\
 & = 450 \div 1.8 \times \frac{5}{8} \\
 & = 156 \frac{1}{4} \\
 & (3800 - 800) \times 14\% \\
 & = 3000 \times 0.14 \\
 & = 420
 \end{aligned}$$

第8页

$$\begin{aligned}
 1. \quad & C = 2\pi r = 2 \times 3.14 \times 4 \\
 & = 25.12(\text{cm}) \\
 & S = 3.14 \times 4^2 = 3.14 \times 16 \\
 & = 50.24(\text{cm}^2) \\
 & C = \pi d = 3.14 \times 10 = 31.4(\text{dm}) \\
 & S = 3.14 \times (10 \div 2)^2 \\
 & = 3.14 \times 5^2 \\
 & = 78.5(\text{dm}^2)
 \end{aligned}$$

$$\begin{aligned}
 2. \quad & S = 3.14 \times (0.6 \div 2)^2 = 0.2826 \\
 & (\text{cm}^2) \\
 & C = 3.14 \times 0.6 = 1.884(\text{cm}) \\
 & S = 3.14 \times 6 \times 6 = 113.04(\text{m}^2) \\
 & C = 3.14 \times 6 \times 2 = 37.68(\text{m})
 \end{aligned}$$

半径(r)	直径(d)	周长(C)	面积(S)
2cm	4cm	12.56cm	12.56cm ²
3dm	6dm	18.84dm	28.26dm ²
4cm	8cm	25.12cm	50.24cm ²
0.5m	1m	3.14m	0.785m ²

第9页

$$\begin{aligned}
 1. \quad & (1) S_{\text{侧}} = 2\pi rh \\
 & = 2 \times 3.14 \times 5 \times 12 \\
 & = 3.14 \times 120 \\
 & = 376.8(\text{cm}^2) \\
 & S_{\text{底}} = \pi r^2 = 3.14 \times 25 \\
 & = 78.5(\text{cm}^2) \\
 & S_{\text{表}} = S_{\text{侧}} + 2S_{\text{底}} \\
 & = 376.8 + 78.5 \times 2 \\
 & = 533.8(\text{cm}^2) \\
 & (2) S_{\text{侧}} = 2 \times 3.14 \times 3 \times 4 \\
 & = 3.14 \times 24 \\
 & = 75.36(\text{cm}^2) \\
 & S_{\text{底}} = 3.14 \times 3^2 \\
 & = 28.26(\text{cm}^2) \\
 & S_{\text{表}} = S_{\text{侧}} + 2S_{\text{底}} \\
 & = 75.36 + 28.26 \times 2 \\
 & = 131.88(\text{cm}^2)
 \end{aligned}$$

$$\begin{aligned}
 2. \quad & 2 \times 3.14 \times 5 \times 8 + 3.14 \times 5^2 \times 2 \\
 & = 3.14 \times 80 + 3.14 \times 50 \\
 & = 3.14 \times 130 \\
 & = 408.2 \\
 & 3.14 \times 8 \times 5 + 3.14 \times (8 \div 2)^2 \\
 & = 3.14 \times 40 + 3.14 \times 16 \\
 & = 3.14 \times 56 \\
 & = 175.84 \\
 & 18.84 \times 5 + 3.14 \times (18.84 \\
 & \quad \div 3.14 \div 2)^2 \\
 & = 94.2 + 3.14 \times 9 \\
 & = 122.46 \\
 & 3.14 \times 0.5^2 \times 4 \\
 & = 3.14 \times 0.25 \times 4 \\
 & = 3.14
 \end{aligned}$$

第10页

$$\begin{aligned}
 S_{\text{表}} &= (ab + ah + bh) \times 2 \\
 &= (7 \times 3 + 7 \times 5 + 3 \times 5) \times 2 \\
 &= 71 \times 2 \\
 &= 142(\text{平方厘米}) \\
 S_{\text{表}} &= 6 \times a^2 = 6 \times 5 \times 5 \\
 &= 150(\text{cm}^2) \\
 S_{\text{表}} &= S_{\text{侧}} + 2S_{\text{底}} \\
 &= 3.14 \times 4 \times 8 + 3.14 \times (4 \div 2)^2 \\
 & \quad \times 2 \\
 &= 125.6(\text{平方厘米}) \\
 S_{\text{表}} &= S_{\text{侧}} + 2S_{\text{底}} \\
 &= 3.14 \times 0.5 \times 2 \times 3 + 3.14 \times \\
 & \quad 0.5^2 \times 2 \\
 &= 10.99(\text{dm}^2) \\
 S_{\text{表}} &= S_{\text{侧}} + 2S_{\text{底}} \\
 &= 12.56 \times 10 + 3.14 \times (12.56 \\
 & \quad \div 3.14 \div 2)^2 \times 2 \\
 &= 150.72(\text{cm}^2) \\
 S_{\text{表}} &= 3.14 \times 4 \times 6 + 3.14 \times 4 \times 2 \times 6 \\
 & \quad + 3.14 \times 4^2 \times 2 \\
 &= 326.56(\text{cm}^2)
 \end{aligned}$$

第11页

$$\begin{aligned}
 1. \quad & (1) V_{\text{圆柱}} = Sh \\
 & = 16 \times 15 \\
 & = 240(\text{cm}^3) \\
 & (2) V_{\text{圆柱}} = \pi r^2 h \\
 & = 3.14 \times 15^2 \times 20 \\
 & = 3.14 \times 4500 \\
 & = 14130(\text{cm}^3) \\
 & (3) V_{\text{圆柱}} = \pi(d \div 2)^2 h \\
 & = 3.14 \times (8 \div 2)^2 \times 12 \\
 & = 3.14 \times 192 \\
 & = 602.88(\text{dm}^3) \\
 & (4) V_{\text{圆柱}} = \pi(d \div 2)^2 h \\
 & = 3.14 \times (6 \div 2)^2 \times 6 \\
 & = 3.14 \times 54 \\
 & = 169.56(\text{m}^3)
 \end{aligned}$$

$$\begin{aligned}
 2. \quad & 3.14 \times 4^2 \times 4.5 \\
 & = 3.14 \times 16 \times 4.5 \\
 & = 226.08 \\
 & 3.14 \times (16 \div 2)^2 \times 4 \\
 & = 3.14 \times 64 \times 4 \\
 & = 803.84 \\
 & 3.14 \times (8 \div 2)^2 \times 5 \\
 & = 3.14 \times 16 \times 5 \\
 & = 251.2 \\
 & 3.14 \times (3 \div 2)^2 \times 0.5 \times 2 \\
 & = 3.14 \times 1.5 \times 1.5 \times 1 \\
 & = 7.065
 \end{aligned}$$





第 12 页

- $V_{\text{圆柱}} = \pi r^2 h$
 $= 3.14 \times 1^2 \times 5$
 $= 15.7(\text{cm}^3)$
 $V_{\text{圆柱}} = \pi(d \div 2)^2 h$
 $= 3.14 \times (6 \div 2)^2 \times 8$
 $= 3.14 \times 9 \times 8$
 $= 226.08(\text{cm}^3)$
 $r = C \div \pi \div 2$
 $= 18.84 \div 3.14 \div 2$
 $= 3(\text{dm})$
 $V_{\text{圆柱}} = \pi r^2 h$
 $= 3.14 \times 3^2 \times 4$
 $= 113.04(\text{dm}^3)$
 $S_{\text{底}} = \pi(R^2 - r^2)$
 $= 3.14 \times (0.5^2 - 0.4^2)$
 $= 3.14 \times 0.09$
 $= 0.2826(\text{m}^2)$
 $V_{\text{圆柱}} = Sh$
 $= 0.2826 \times 2$
 $= 0.5652(\text{m}^3)$
- $h = V \div S$
 $= 320 \div 8$
 $= 40(\text{dm})$
 $h = V \div (\pi r^2)$
 $= 282.6 \div (3.14 \times 3^2)$
 $= 10(\text{cm})$

第 13 页

半径 r	直径 d	底面 周长 C	高 h	表面 积 S	体积 V
1cm	2cm	6.28 cm	5cm	37.68 cm^2	15.7 cm^3
3cm	6cm	18.84 cm	1cm	75.36 cm^2	28.26 cm^3
2m	4m	12.56 m	3m	62.8 m^2	37.68 m^3
$\frac{1}{2}$ dm	1dm	3.14 dm	4dm	14.13 dm^2	3.14 dm^3

- $(1) h = V \div S = 300 \div 16$
 $= 18.75(\text{dm})$
 $(2) h = V \div (\pi r^2)$
 $= 282.6 \div (3.14 \times 3^2)$
 $= 10(\text{cm})$
 $(3) h = V \div [\pi(d \div 2)^2]$
 $= 37.68 \div [3.14 \times (4 \div 2)^2]$
 $= 37.68 \div 12.56$
 $= 3(\text{cm})$
 $(4) h = S_{\text{侧}} \div (2\pi r)$
 $= 94.2 \div (2 \times 3.14 \times 3)$
 $= 94.2 \div 18.84$
 $= 5(\text{cm})$
- $V = 3.14 \times 1^2 \times 2 = 6.28(\text{立方厘米})$

第 14 页

- $V = \pi(d \div 2)^2 h$
 $= 3.14 \times (8 \div 2)^2 \times 8$
 $= 401.92(\text{立方厘米})$
 $V = a \times b \times h = 6 \times 5 \times 4$
 $= 120(\text{立方厘米})$
 算法一:
 $V = \pi(d_{\text{外}} \div 2)^2 h - \pi(d_{\text{内}} \div 2)^2 h$
 $= 3.14 \times 2^2 \times 4 - 3.14 \times 1^2 \times 4$
 $= 3.14 \times 12$

$= 37.68(\text{立方厘米})$

算法二:

- $V = \pi(R^2 - r^2)h$
 $= 3.14 \times (2^2 - 1^2) \times 4$
 $= 3.14 \times 3 \times 4$
 $= 37.68(\text{立方厘米})$
- $3.14 \times 3^2 \times 12 + 3.14 \times 3^2 \times 8$
 $= 3.14 \times 3^2 \times (12 + 8)$
 $= 565.2$
 $3.14 \times 3^2 \times 10 \times 4$
 $= 3.14 \times 360$
 $= 1130.4$
 $45 \div 1.8 \times 2.3$
 $= 25 \times 2.3$
 $= 57.5$
 $502.4 \div (3.14 \times 4^2)$
 $= 502.4 \div 50.24$
 $= 10$

第 15 页

- $S = 3.14 \times 3^2 = 28.26(\text{cm}^2)$
 $S = 3.14 \times (10 \div 2)^2$
 $= 78.5(\text{cm}^2)$
 $S = 3.14 \times (18.84 \div 3.14 \div 2)^2$
 $= 28.26(\text{cm}^2)$
- $S = 3.14 \times 3 \times 2 \times 4.5 + 2 \times 3.14 \times 3^2$
 $= 84.78 + 56.52$
 $= 141.3(\text{平方厘米})$
 $V = 3.14 \times 3^2 \times 4.5$
 $= 127.17(\text{立方厘米})$
- $(1) h = 260 \div 40 = 6.5(\text{cm})$
 $(2) h = 251.2 \div (3.14 \times 2^2)$
 $= 20(\text{cm})$

第 16 页

- $(1) V_{\text{圆锥}} = \frac{1}{3} Sh$
 $= \frac{1}{3} \times 150 \times 27$
 $= 1350(\text{cm}^3)$
 $(2) V_{\text{圆锥}} = \frac{1}{3} \pi r^2 h$
 $= \frac{1}{3} \times 3.14 \times 6^2 \times 9$
 $= 339.12(\text{cm}^3)$
 $(3) V_{\text{圆锥}} = \frac{1}{3} \times 3.14 \times (4 \div 2)^2 \times 6$
 $= 25.12(\text{cm}^3)$
- $\frac{1}{3} \times 3.14 \times 10 \times 10 \times 15$
 $= \frac{1}{3} \times 4710$
 $= 1570$
 $\frac{1}{3} \times 3.14 \times (10 \div 2)^2 \times 12$
 $= \frac{1}{3} \times 942$
 $= 314$
 $\frac{1}{3} \times 3.14 \times 27 \times 5$
 $= \frac{1}{3} \times 423.9$
 $= 141.3$
 $\frac{1}{3} \times 3.14 \times (\frac{6}{2})^2 \times 1.5$

$$= \frac{1}{3} \times 42.39$$

$$= 14.13$$

第 17 页

1.

名称	半径 r	直径 d	高 h	表面 积 S	体积 V
圆柱	5 cm	10 cm	3 cm	251.2 cm^2	235.5 cm^3
	0.2 m	0.4 m	0.5 m	0.8792 m^2	0.0628 m^3
圆锥	3 dm	6 dm	5 dm	—	47.1 dm^3
	$\frac{1}{2}$ m	1m	2.4m	—	0.628 m^3

- $V_{\text{圆锥}} = \frac{1}{3} \pi r^2 h$
 $= \frac{1}{3} \times 3.14 \times 3 \times 3 \times 8$
 $= 75.36(\text{cm}^3)$
 $V_{\text{圆柱}} = \pi r^2 h$
 $= 3.14 \times 2 \times 2 \times 4$
 $= 50.24(\text{立方分米})$
- $h = 12.56 \div \frac{1}{3} \div 3.14 \div (\frac{4}{2})^2$
 $= 3(\text{cm})$

第 18 页

- $12 : 2 = 12 \div 2 = 6$
 $1.5 : \frac{1}{4} = \frac{3}{2} \div \frac{1}{4} = 6$
 $\frac{1}{3} : \frac{1}{18} = \frac{1}{3} \div \frac{1}{18} = 6$
 $2.4 : \frac{2}{5} = 2.4 \div 0.4 = 6$
- $(1) \frac{1}{3} : \frac{1}{9}$ 和 $\frac{1}{2} : \frac{1}{6}$
 $\frac{1}{3} : \frac{1}{9} = \frac{1}{3} \times 9 = 3,$
 $\frac{1}{2} : \frac{1}{6} = \frac{1}{2} \times 6 = 3,$ 因为比值
 $3 = 3,$ 所以它们能组成比例。比
 例是: $\frac{1}{3} : \frac{1}{9} = \frac{1}{2} : \frac{1}{6}$
 $(2) 0.3 : 0.2$ 和 $40 : 30$
 $0.3 : 0.2 = 0.3 \div 0.2 = 1.5,$
 $40 : 30 = 1 \frac{1}{3},$ 因为比值
 $1.5 \neq 1 \frac{1}{3},$ 所以它们不能组成比例。
 $(3) \frac{60}{40}$ 和 $\frac{27}{18}$
 $\frac{60}{40} = 1.5, \frac{27}{18} = 1.5,$ 因为(比值
 $1.5 = 1.5),$ 所以(它们能组成比
 例)。比例是 $(\frac{60}{40} = \frac{27}{18})$
 $(4) 2 : 0.5$ 和 $1 : 4$
 $2 : 0.5 = 4, 1 : 4 = \frac{1}{4},$ 因为(比
 值 $4 \neq \frac{1}{4}),$ 所以(它们不能组成
 比例)。

