P6: convert fractions into decimals

Convert the following fractions into decimals. Correct the answers to 2 decimal places if needed.

1) $\frac{5}{8}$ = _____

2) $\frac{5}{6}$ = _____

3) $2\frac{7}{10}$ = _____

4) $4\frac{22}{35}$ = _____

5) $3\frac{16}{43}$ = _____

6) $1\frac{11}{18}$ = _____

7) $9\frac{19}{25}$ = _____

8) $9\frac{67}{125}$ = _____

9) $\frac{150}{11}$ = _____

10) $2\frac{45}{10}$ = _____

11) $14\frac{15}{18}$ = _____

12) $8\frac{3}{4}$ = _____

13) $5\frac{2}{3}$ = _____

14) $6\frac{8}{15}$ = _____

15) $3\frac{3}{2}$ = _____

16) $\frac{25}{8}$ = _____

17) $12\frac{7}{250}$ = _____

18) $\frac{126}{21}$ = _____

19) $1\frac{18}{19}$ = _____

20) $\frac{35}{42}$ = _____

Convert the following decimals into percentages.

1) 2.35 = _____

2) 0.538 = _____

3) 0.095 = _____

4) 6.85 = _____

5) 0.89 = _____

6) 3.215 = _____

Arrange the numbers in descending order.

7) $6.475,\ 6\frac{3}{4},\ 64.5\%$ _____>_____>_____

8) $3\frac{16}{21},\ 3.5,\ 370\%$ _____>_____>_____

9) $7.95\%,\ 0.79,\ \frac{38}{48}$ _____>_____>_____

10) $42.7,\ 429\%,\ 42\frac{7}{8}$ _____>_____>_____

Arrange the numbers in ascending order.

11) $56.7\%,\ 0.07,\ \frac{9}{118}$ _____<_____<_____

12) $\frac{35}{62},\ 5.6,\ 56\%$ _____<_____<_____

13) $98.7,\ 998.6\%,\ 9\frac{15}{16}$ _____<_____<_____

14) $107\%,\ 1\frac{7}{9},\ 1.7$ _____<_____<_____

Calculate the following algebraic expressions.
Correct the answers to 2 decimal places if needed.

1) $(2.5+3.15)\div 0.25$

2) $(36.2-2.82)\div 2.8$

3) $3.72\div 0.6-5.1\times 0.2$

4) $3.5\times 2.12+12.2\div 6.1$

5) $12\times 0.65\div 3.25$

6) $45.4\div 9.08\times 2.6$

7) $16.8\times 3.72+5$

8) $144.9\div 12.6-8.24$

Simplify the following algebraic expressions.

1) $6a-2a$

2) $5x-6x+x$

3) $10x+4x$

4) $8x-4y+2x$

5) $5y-3y+4x$

6) $7b-3a-5b+6a$

7) $15m-4m+4n-2n$

8) $4(2x+3x)$

9) $\frac{1}{2}(3y-y)$

10) $\frac{x}{2}+x$

11) $y-\frac{1}{3}x-\frac{3}{4}y+2x$

12) $\frac{m}{4}+\frac{2m}{5}+2-n$

13) $22-\frac{6m}{5}+2m-6$

14) $2(4m+3)$

15) $9s-\frac{13}{4}s+6p-5$

16) $4(3x+5y)$

17) $20(\frac{3}{4}x+6y+2x-\frac{y}{5})$

18) $\frac{y+10}{2}+y-2$

19) $10(\frac{3u+4v}{5})-3u+2v$

20) $12-x-6+5x$

Solve the following equations.

1) $25+8x=41$

2) $20-4x=5$

3) $\frac{y-8}{5}=6$

4) $\frac{3m}{5}-4=11$

5) $\frac{8}{x-1}=6$

6) $5(y+2)=35$

7) $\frac{2}{3}(4x-5)=18$

8) $3(2x-5)+3x=21$

9) $\frac{x}{3}+\frac{x+6}{6}=2$

10) $\frac{x}{6}=\frac{5}{4}$

Solve the following equations.

1) $\frac{x+4}{6}=\frac{x-1}{2}$

2) $\frac{x}{3}-1=x-3\frac{2}{3}$

3) $y(1-15\%)=76.5$

4) $17-5(x+1)=2$

5) $\frac{5}{y}=\frac{6}{15}$

6) $32-\frac{2}{3}u=16$

7) $\frac{a}{4}-\frac{a}{5}=2$

8) $(1-42\%)t+t=3.95$

9) $\frac{4(2e)}{5}-e=1\frac{1}{5}$

10) $5+6f=\frac{2f+53}{6}$

Covert the units. Correct the answers to 1 decimal place if needed.

1) 108km/h = _____m/s

2) 56 m/s = _____km/h

3) 0.3 km = _____m

3) 254.5 m = _____km

4) 180.5km/h = _____m/s

5) 5.5m/s = _____km/h

6) 67 km = _____m

7) 657 km/h = _____m/s

8) 32.5 m/s = _____km/h

10) 320 km/h = _____m/s

11) 0.5 m = _____km

12) 250 m/s = _____km/h

13) 462 km/h = _____m/s

14) 580m/s= _____km/h

15) 0.006 km = _____m

Complete the table below.

	Distance	Time	Speed
(1)	325 m	13 seconds	m/s
(2)	630 m	seconds	15 m/s
(3)	km	25 mins	32 m/s
(4)	63 km	hr mins	54 km/h
(5)	580 km	mins	250 m/s

6. Cherry sets off from home and walk to school at 7:35 a.m. every morning. She arrives school at 7:55 a.m. and walks at an average speed of 2m/s. Today, she is late and sets off at 7:42 a.m. She wants to walks at an average speed of 3m/s. Can she arrive school before 7:55 a.m.?

7. Amanda and Chole started running at the same position and towards the same direction. They run at the average speed of 5 m/s and 3.8 m/s respectively. After 8 minutes, What is the distance between them?

Complete the table below.

	Marked price	Discount rate	Discount	Selling price
(1)	$480	12%		
(2)	$225		$36	
(3)		5%	$8	
(4)			$500	$2000
(5)	$4600			$3772

6) Mandy wants to buy a shirt. The marked price of the shirt is $298. It's now selling by 15% off. She will have another 10% off because she is a member of the department store. How much should she pay? (Correct the answers to 1 decimal place)

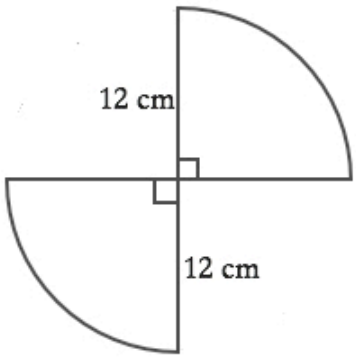
7) Shop A and shop B are selling the same model of television. They sell at $5200 and $4980 respectively. Now, both two shops are on sales. Shop A and Shop B sells the television at 15% off and 10% off respectively. Which shop provides a cheaper selling price? How much cheaper?

Complete the table below.(take $\pi = 3.14$)

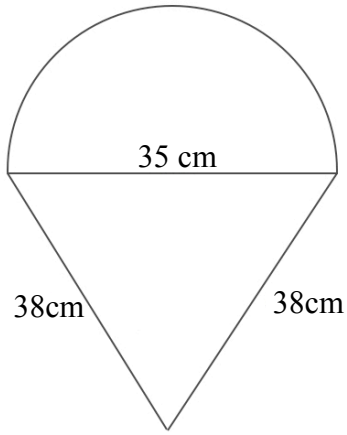
	Radius	Diameter	Circumference
(1)	27 cm		
(2)		43 m	
(3)			103.62 cm
(4)	93.4 km		
(5)			31.4 m

Find the perimeter of the shape below.

6.



7.



8. A wheel has a radius of 12.5 cm. How many rounds does it need to roll for moving the distance of 1884 cm?