

Percentages

Percentage
means 'out of 100'.
 $75\% = \frac{75}{100}$ or $\frac{3}{4}$
or 0.75.



1 Arrange these percentages in ascending order.

2 Match a percentage from above to each equivalent fraction.

a $\frac{20}{100}$, 0.2 or $\frac{1}{5}$

= _____

b $\frac{25}{100}$, 0.25 or $\frac{1}{4}$

= _____

c $\frac{30}{100}$, 0.3 or $\frac{3}{10}$

= _____

d $\frac{35}{100}$, 0.35

= _____

e $\frac{50}{100}$, $\frac{1}{2}$ or 0.5

= _____

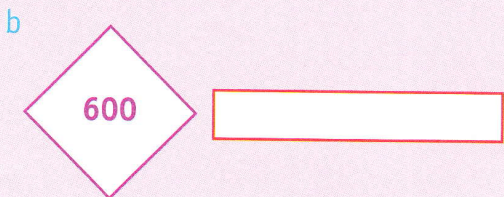
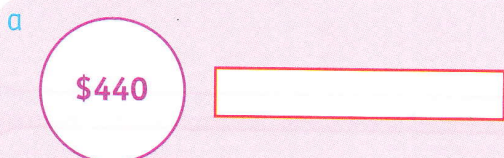
f $\frac{75}{100}$, $\frac{3}{4}$ or 0.75

= _____

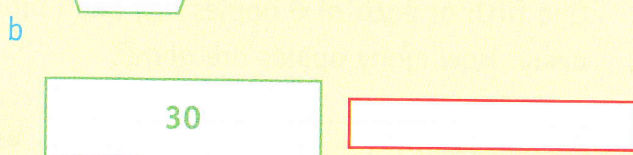
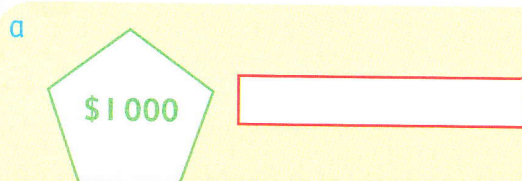
g $\frac{8.5}{100}$ or 0.085

= _____

3 Shade 25% and write the answers.



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Calculating percentages





1 Use equivalent percentages and fractions to calculate the following.

- | | | | |
|---|--|---------------------------------------|--------------------------------------|
| a 25% of \$40
= <u>$\frac{1}{4}$ of \$40</u>
= _____ | b 20% of \$50
= _____
= _____ | c 10% of \$60
= _____
= _____ | d 50% of \$120
= _____
= _____ |
| e 25% of 1 day
= _____
= _____ | f 10% of 1 metre
= _____
= _____ | g 20% of 1 hour
= _____
= _____ | h 5% of 1 km
= _____
= _____ |

2 Use equivalent decimals and fractions to calculate the following.

- | | | | |
|-----------------------------------|------------------------------------|-----------------------------------|--------------------------------------|
| a 0.2 of 10
= _____
= _____ | b 0.25 of 24
= _____
= _____ | c 0.1 of 50
= _____
= _____ | d 0.5 of 1 day
= _____
= _____ |
|-----------------------------------|------------------------------------|-----------------------------------|--------------------------------------|

3 What is the discount in each case?

- | | | | |
|--|---|--|--|
| a  10% discount
<input type="text"/> | b  5% discount
<input type="text"/> | c  20% discount
<input type="text"/> | d  25% discount
<input type="text"/> |
|--|---|--|--|

DISCOUNT IS ALWAYS SUBTRACTED

4 What is the price after the discount has been deducted?

- | | | |
|--|--|--|
| a 

\$80
<input type="text"/> | b 

\$15
<input type="text"/> | c 

\$35
<input type="text"/> |
|--|--|--|

5 The Smiths are shopping for a new chair. They are confused by the deals they are offered. Help them choose the cheapest chair. Which one do you estimate? _____

- | | | |
|---|---|--|
| a 
\$1 500
20% off
Cost _____ | b 
\$1 250
10% off
Cost _____ | c 
\$1 600
Save 25%
Cost _____ |
|---|---|--|

Percentages of amounts

Add GST	
Cost Price	\$40
10% GST	+\$4
Total	<u>\$44</u>

1 Complete these price tags.

a Price \$30

+ 10% GST _____

Sale price _____

b Price \$75

+ 10% GST _____

Sale price _____

c Price \$1 200

+ 10% GST _____

Sale price _____

d Price \$500

+ 10% GST _____

Sale price _____

e Price \$135

+ 10% GST _____

Sale price _____

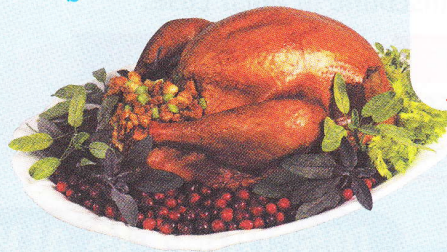
2 These are the Faro family's monthly bills. They wish to reduce every one by 20%. What will be the new amount for each?

a



Telephone
\$120

b



Dining out
\$250

c



Food
\$480

d



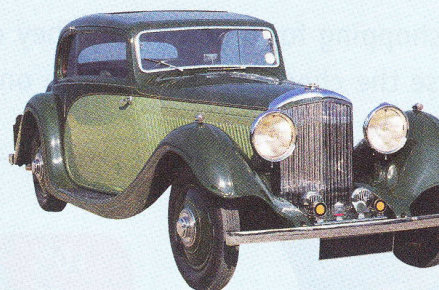
Dog food
\$60

e



Maintenance
\$300

f



Car expenses
\$220

3 How much would the Faro family save each month? _____