

Name: \_\_\_\_\_

School: \_\_\_\_\_ Class: \_\_\_\_\_

Date: \_\_\_\_\_

- 1 A washing machine normally priced at \$850 is being offered at a sale with a 20% discount. Find the sale price of the washing machine.

- 2 A menswear store normally sells jeans for \$56 per pair. In a sale the store offers \$7 off the price of each pair of jeans. Find the percentage discount being offered on each pair of jeans.

- 3 William bought a mountain bike for \$360 and sold it for a 15% profit. Find
- a the profit

b the selling price

- 4 Daniel had no further use for his skateboard and sold it for \$66, making a loss of 12%. How much did he pay for his skateboard?

- 5 A 420 gram tin of spaghetti contains the amounts of nutrients shown.

Nutrient	Weight
Protein	20.6 g
Fat	2.9 g
Carbohydrate	51.2 g
Sugars	18.5 g
Dietary fibre	21.0 g
Sodium	1600 mg
Potassium	1175 mg
Total	

- a Express the following nutrients as a percentage of the total amount:

i protein

ii sodium

- b Calculate the weight of carbohydrate in a 100 g serving of spaghetti.

- c In the next week the company plans to produce 1 tonne of spaghetti. How much carbohydrate would be present in this weight of spaghetti?

New Insight Mathematics  
Year 7 Stage 4  
Chapter 10  
Percentages

OXFORD  
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Homework Bank **A**

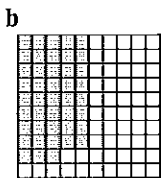
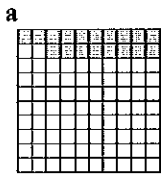
- 6 Martha invested \$5400 in an account which pays 3.6% p.a. interest. How much interest did she earn for the year?
- 7 An electrical goods store normally sells CD players for \$165. In a sale a 15% discount was offered on all items in the store. Find the sale price of the CD players.
- 8 Damian bought a surfboard for \$490. 3 months later he sold it for a loss of 20%. Find the price for which he sold his surfboard.

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1 What percentage is represented by the following shaded diagrams?



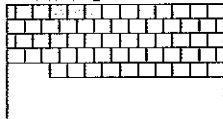
2 Choose the correct answer by estimating the percentage.

a How much cola remains in the bottle?

- A 10%                      B 50%  
 C 80%                      D 25%



b How much of the patio still needs to be paved?



- A 60%    B 10%    C 80%    D 40%

3 Express the following amounts as percentages:

a 0.4624

b 0.73

c 0.002

d 1.532

4 Express the following fractions and mixed numbers as percentages.

a  $\frac{4}{10}$

b  $\frac{5}{8}$

c  $2\frac{1}{4}$

d  $5\frac{2}{5}$

5 Express the following as percentages:

a 3.62

b  $\frac{7}{50}$

c  $4\frac{7}{25}$

6 Express the following percentages as a fraction or a mixed number:

a 47%

b 36%

c 140%

d 325%

7 Convert the following percentages into decimal form:

a 36.5%

b 6.75%

c 127.5%

8 Express the following percentages as fractions in their simplest form:

a 10.25%

b 56.75%

9 Find

a 20% of 95

b 45% of 400

c 15% of 120

10 Express the first quantity as a percentage of the second.

a 10 km, 50 km

b 8 months, 2 years

c mm, 8 cm

11 What are the "20% off" sale prices that would appear on the following items whose normal prices are as follows:

a \$150

b \$27.50

12 James scored 23 marks out of a possible 40 marks for his mathematics test. What was his score as a percentage?

13 30% of a farmer's crop was barley and the rest was wheat. If he planted 1200 hectares of crops, what area was planted with barley?

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1 Convert the following percentages into decimal form:

a 6.25%

b 112.5%

c 3.26%

2 Express the following percentages as a fraction or a mixed number in their simplest form:

a 10.75%

b 121.4%

c 0.05%

3 Find

a 25% of 160

b 15% of 40

c 75% of 56

4 Express as a percentage:

a 64 marks out of a possible 80 marks

b \$8000 annual house rental out of my annual salary of \$40 000

c 332 books sold out of 500 printed

d 45 seconds out of 2 minutes

5 What are the "15% off" sale prices that would appear on the following items whose normal prices are given below? (Round all answers to the nearest cent.)

a \$148.50

b \$465

6 What is the percentage mark-down for the items which carry a sale price as shown with the normal ticket price in brackets? Give all answers correct to the nearest whole number.

a \$17.50 (\$20)

b \$33.30 (\$40)

7 640 students attend Peter's school. If 35% of these students use public transport, how many students travel to school by some other means?

8 Vicki has eaten  $1\frac{1}{2}$  of her chocolate bar and Bonnie has 90% of hers left. Who has the most chocolate bar left?

9 Calculate the simple interest on the following investments:

a \$1500 at 7% for 2 years

b \$4000 at 3.25% for 5 years

c \$350 at 9% p.a. for 4 months

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1 Express the following as percentages:

a 0.042

b 3.51

c  $\frac{7}{40}$

d  $5\frac{4}{5}$

2 Convert the following percentages to a fraction or a mixed number in simplest form:

a 47%

b 130%

c 4%

3 Convert the following percentages to decimals:

a 14.5%

b 122.25%

4 Express the following percentages as fractions in their simplest form:

a 47.5%

b 12.75%

5 Find

a 75% of 96

b 95% of 140

c 16% of 240

6 What percentage is

a 24 of 60

b 220 mL of 2 L

c \$1.20 of \$300

d 16 hours of 1 day

- 7 What is the "12% off" sale price on an item normally listed as \$256?
- 8 What is the ticket price when goods are marked up 32% and the cost price is
- a \$140
- b \$3400
- 9 What is the percentage markdown for items which carry a sale price as shown with the normal ticket price in brackets.
- a \$61.20 (\$72)
- b \$104.96 (\$128)
- 10 Calculate the simple interest on the following investments:
- a \$4200 at 2.5% p.a. for 3 years
- b \$5200 at 6.25% for 4 months



Sheet A

- 1 \$680
- 2  $12\frac{1}{2}\%$
- 3 a \$54 b \$414
- 4 \$75
- 5 a i 17.6% ii 1.4% b 12.2 grams c 112kg
- 6 \$194.40
- 7 \$140.25
- 8 \$392

Sheet B

- 1 a 18% b 43%
- 2 a C b D
- 3 a 46.24% b 73% c 0.2% d 153.2%
- 4 a 40% b  $62\frac{1}{2}\%$  c 225% d 540%
- 5 a 362% b 14% c 428%
- 6 a  $\frac{47}{100}$  b  $\frac{9}{25}$  c  $1\frac{2}{5}$  d  $3\frac{1}{4}$
- 7 a 0.365 b 0.0675 c 1.275
- 8 a  $\frac{41}{400}$  b  $\frac{227}{400}$
- 9 a 19 b 180 c 18
- 10 a 20% b  $33\frac{1}{3}\%$  c  $6\frac{1}{4}\%$
- 11 a \$120 b \$22
- 12  $57\frac{1}{2}\%$
- 13 360 ha

Sheet C

- 1 a 0.0625 b 1.125 c 0.0326
- 2 a  $\frac{43}{400}$  b  $1\frac{107}{500}$  c  $\frac{1}{2000}$
- 3 a 40 b 6 c 42
- 4 a 80% b 20% c 66.4% d 37.5%
- 5 a \$126.23 b \$395.25
- 6 a 13% b 17%
- 7 416 students
- 8 Vicki,  $\frac{11}{12}$  or 91.67% left
- 9 a \$210 b \$650 c \$10.50

Sheet D

- 1 a 4.2% b 351% c 17.5% d 580%
- 2 a  $\frac{47}{100}$  b  $1\frac{3}{10}$  c  $\frac{1}{25}$
- 3 a 0.145 b 1.2225
- 4 a  $\frac{19}{40}$  b  $\frac{51}{400}$
- 5 a 72 b 133 c 38.4
- 6 a 40% b 11% c 0.4% d  $66\frac{2}{3}\%$
- 7 \$225.28
- 8 a \$184.80 b \$4488
- 9 a 15% b 18%
- 10 a \$315 b \$108.33