Word Problems
Term 3 Wk 8

Lucy's books

Lucy wants to cover her school textbooks in Duraseal book covering. She opens each book and measures the length and width of the cover.

1. Lucy's maths textbook measures 32cm by 24cm. What is it's area?
768cm2

2. Lucy's English textbook measures 42cm by 27cm. What is it's area?
1134cm2

3. Lucy's science textbook measures 43cm by 28cm. What is it's area?
1120cm2

4. Lucy's arts textbook measures 52cm by 30.5cm. What is it's area?
1586cm2

5. What is the total area of all four textbooks?
4608cm2

6. Lucy decides to allow an extra 120cm2 per book for overlaps. What area of Duraseal will she need in order to cover all her textbooks?
5088cm2

7. Duraseal comes in rolls 50cm wide by 1m long. How many rolls will Lucy need to buy?
2

Time Travel

Imagine the hour hand on a clock face.

1. How many degrees does the hour hand rotate between 8 am and 9 am?
30 degrees

2. How many degrees does the hour hand rotate between 2 pm and 5 pm?
90 degrees

3. How many degrees does the hour hand rotate between 9 am and 1 pm?
120 degrees

4. How many degrees does the hour hand rotate between 1 pm and 7 pm?
180 degrees

5. How many degrees does the hour hand rotate between 11 am and 4 pm?

150 degrees

6. How many degrees does the hour hand rotate between 10 am and 8 pm?

300 degrees

Funfair fun

The funfair has come to town.

1. Tickets for the hall of mirrors cost $4.99. Three friends buy tickets. What is the total cost?

$14.97

2. Tickets for the big wheel cost $5.20, and tickets for the ghost train cost $3.79. How much more does it cost to go on the big wheel than the ghost train?

$1.41

3. Tickets for the dodgems cost $6.60 for adults and $3.79 for children. How much will one adult and one child pay altogether to go on the dodgems?

$10.39

4. Tickets for the hoopla cost $1.25 Sophie has five goes on the hoopla. How much does she pay?

$6.25

5. Luke buys four portions of candyfloss, paying a total of $17.04. How much does one portion of candyfloss cost?

$4.26

6. At the shooting range, you can pay $4.70 for six shots or $6.80 for nine shots.
a) Which is the cheaper option per shot?

$6.80 for 9 shots

b) How much less do you pay per shot for the cheaper option?

$0.03

Angle Equations

1. There are three angles on one side of a straight line. Two of the angles measure 89° and 46°, respectively. What is the size of the third angle?

45 degrees

2. The interior angles of a pentagon always add up to 540°. What is the size of each interior angle in a regular pentagon?

108 degrees

3. Three of the angles of a quadrilateral measure 84°, 102° and 73°. What is the size of the fourth angle?

101 degrees

4. Harry faces South and makes a 270^0 clockwise turn. Which direction is he facing now?

East

5. How many degrees does the hour hand of a clock move between:

a) 5am and 10am

150 degrees

b) 3pm and 6pm

90 degrees

c) 3pm and 9pm

180 degrees

The Sports Stadium

A Sports stadium has 50,000 seats.

1. At a particular Sporting event, 80% of the seats are occupied.

a) How many seats are occupied?

40,000

b) How many seats are unoccupied? What percentage is this?

10,000 or 20%

2. Ten percent of the seats are at the end of a row. How many seats are at the end of a row?

5,000 seats

3. Eight percent of the seats are removable. How many seats are removable?

4,000

4. Fifty-five percent of the seats are priced at $50, 30% of the seats are priced at $75 and 15% of the seats are priced at $100. How many seats are there at each price?

7,500 seats for $100

15,000 seats for $75

27,500 seats for $50

5. Forty percent of the seats are blue, 35% of the seats are red and 25% of the seats are yellow. How many seats are there in each colour?

12,500 yellow seats

17,500 red seats

20,000 blue seats

Perimeter Problems

Fred's Framing Shop Specialised in made-to-measure frames. What is the minimum length of framing needed to frame each of the following items?

1. A photograph that measures 10cm by 15cm.

50cm

2. A collection of shells mounted on a board that measure 35 cm square

140cm

3. A watercolour painting that measures 44cm by 28 cm

144

4. A tapestry that measures 57cm by 31cm

176cm

5. An oil painting that measures 75cm by 51cm

252cm

6. A poster that measures 88cm by 66cm

308cm

7. A print that measures 42cm by 60cm

204cm

8. A mirror that measures 100cm by 30cm

260cm