

Aspley State High School
Year 8 Numeracy Term 4
Homework Sheet # 3

Name: _____ Parent's Signature: _____

Textbook Reference – Chapters 5, 6, 7, 11

Part A – Revision

1. Circle the pair of angles below which are complementary.

52, 100, 38, 80

2. a) $-21 + ^{-}8 = \underline{\hspace{2cm}}$ b) $-3 - 5 = \underline{\hspace{2cm}}$ c) $-5 \times 9 = \underline{\hspace{2cm}}$ d) $(-6)^2 = \underline{\hspace{2cm}}$

3. Expand

a) $4m(2a + 3) =$

b) $7y(y + 4) =$

4. Solve for x

a) $12x - 31 = 29$

b) $6(5x + 27) = 72$

5. Calculate

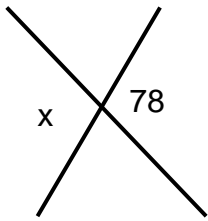
| | | |
|-----------------|-----------------|-----------------------------|
| a) 25% of \$460 | b) 3.5% of \$75 | c) $\frac{112}{130}$ as a % |
|-----------------|-----------------|-----------------------------|

6.

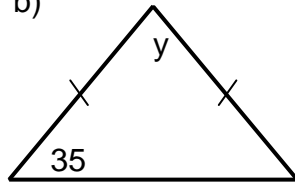
| | | | |
|----------------------------------|-----------------------|---------------------------------------|---------------------------------------|
| a) $3\frac{2}{5} + 2\frac{2}{3}$ | b) $13 - \frac{5}{8}$ | c) $4\frac{4}{5} \times 3\frac{1}{3}$ | d) $\frac{8}{15} \div 1\frac{11}{21}$ |
|----------------------------------|-----------------------|---------------------------------------|---------------------------------------|

7. Find the value of the marked angle, giving coded reason

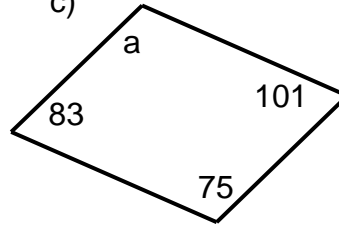
a)



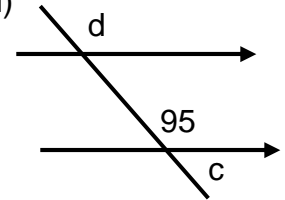
b)



c)

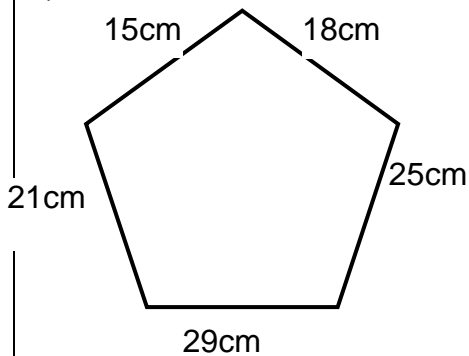


d)

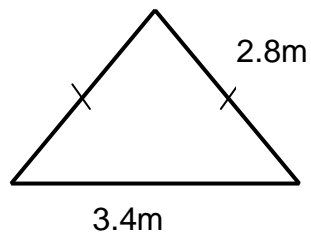


8. Calculate the Perimeter

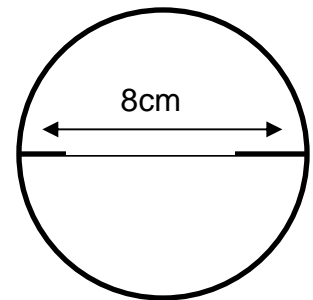
a)



b)



c)



9. Complete

a) $8430\text{m} = \underline{\hspace{2cm}} \text{ km}$

b) $325\text{g} = \underline{\hspace{2cm}} \text{ kg}$

c) $1.5\text{m}^2 = \underline{\hspace{2cm}} \text{ ha}$

d) $3\text{cm}^3 = \underline{\hspace{2cm}} \text{ mL}$

e) $6000\text{cm}^3 = \underline{\hspace{2cm}} \text{ L}$

f) $4 \frac{1}{4} \text{ kg} = \underline{\hspace{2cm}} \text{ kg}$

10. **(Calculator)** If 5 apples cost \$3.25, find the cost of 12 apples

11. **(Calculator)** Calculate correct to 2 decimal places

a) $\sqrt{42} = \underline{\hspace{2cm}}$

b) $7.1^2 + 8^2 = \underline{\hspace{2cm}}$

c) $2 \times 5^3 = \underline{\hspace{2cm}}$

Shade one bubble.



PART B – NAPLAN

1. (Calculator)

Two large containers have a total mass of 3.6 tonnes. The larger container is 0.8 tonne heavier than the smaller container. What is the mass of the larger container?

1.4 t

2.0 t

2.1 t

2.2 t

2. (Calculator)

A skydiver with her parachute open falls at a constant rate of 9.81 metres per second. What distance does she fall in one minute?

5.886km

58.86m

588.6m

5886m

3. (Non-Calculator)

$$\frac{7}{8} - \frac{7}{10} =$$

$\frac{7}{2}$

$\frac{7}{8}$

$\frac{7}{40}$

$\frac{0}{2}$

4. (Non-Calculator)

6 black cherries and 4 red cherries are in a packet. After one of each has been eaten what is the probability of selecting a red cherry from the bag?

5 out of 8

3 out of 5

2 out of 5

3 out of 8

5. (Non-Calculator)

What is the remainder when 187 is divided by 72?

5

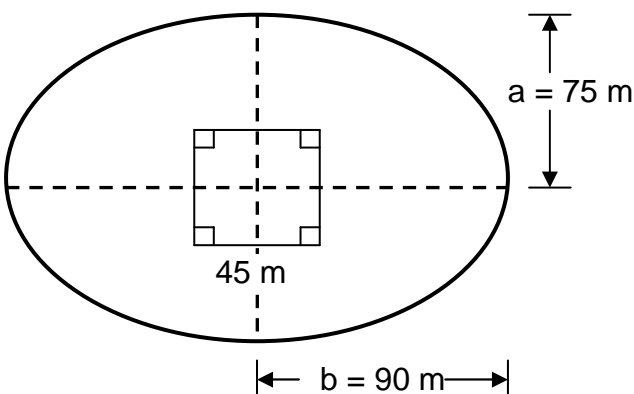
4

6

3

6. (Calculator)

Australian Rules fields are usually in the shape of an ellipse. The area (A) of an ellipse is given by $A = \pi ab$ What is the area of this ellipse?



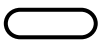
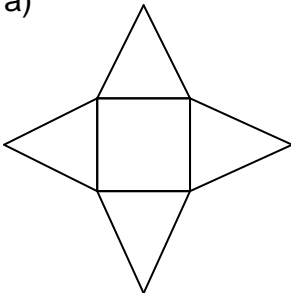
7. (Calculator)

Liberty lives on a farm. She sells the eggs that the hens produce to people living in town. How much will Liberty receive when she sells 16 dozen eggs, including 5 dozen eggs to customers who provide their own egg cartons?

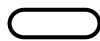
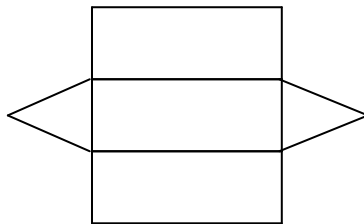


8. Which of the following is a net of a triangular prism?

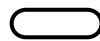
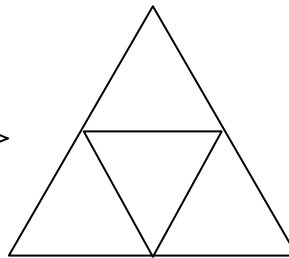
a)



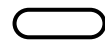
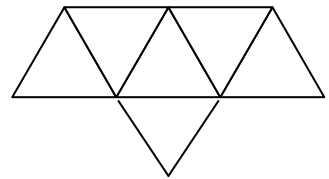
b)



c)



d)



PART C – PROBLEM SOLVING

Quadrants (1/4 circles) have been drawn in each corner of this square. The sides of the square are 10 cm long. What is the perimeter of the shaded shape (to one decimal place)?

