

# Aspley State High School

## Year 8 Numeracy Homework Sheet

### Term 4, # 1

Name: \_\_\_\_\_ Parent's Signature: \_\_\_\_\_

Textbook Reference – Chapters 7, 8, 11

### Part A – Revision

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

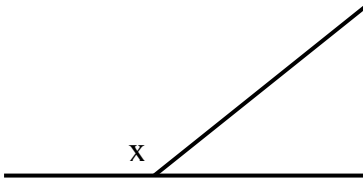
- a)  $2^\circ, 75^\circ$       b)  $110^\circ, 70^\circ$       c)  $33^\circ, 67^\circ$       d)  $18^\circ, 72^\circ$

2. Circle the pairs of angles below which are supplementary

- a)  $60^\circ, 30^\circ$       b)  $125^\circ, 55^\circ$       c)  $90^\circ, 90^\circ$       d)  $113^\circ, 87^\circ$

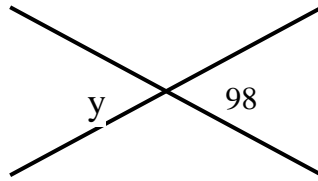
3. Find the measure of the marked angle

a)



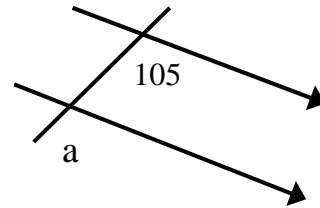
x = \_\_\_\_\_

b)



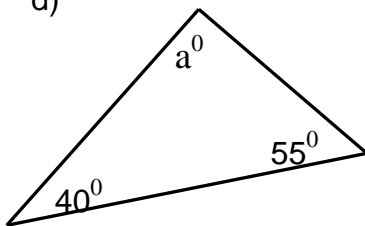
y = \_\_\_\_\_

c)



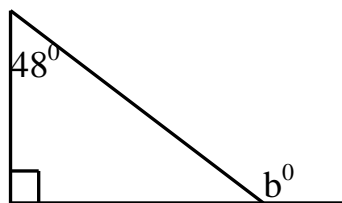
a = \_\_\_\_\_

d)



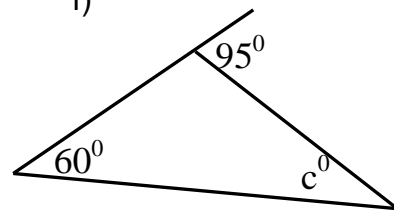
a = \_\_\_\_\_

e)



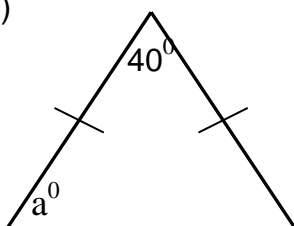
b = \_\_\_\_\_

f)



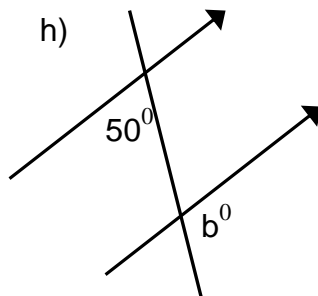
c = \_\_\_\_\_

g)



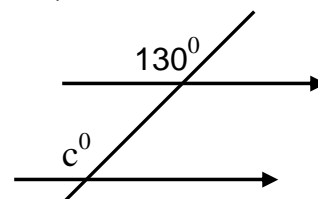
a = \_\_\_\_\_

h)

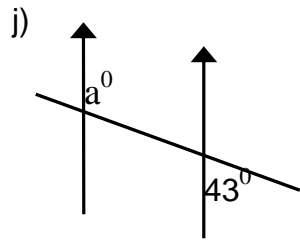


b = \_\_\_\_\_

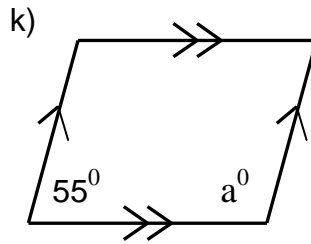
i)



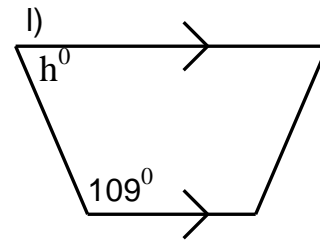
c = \_\_\_\_\_



a = \_\_\_\_\_

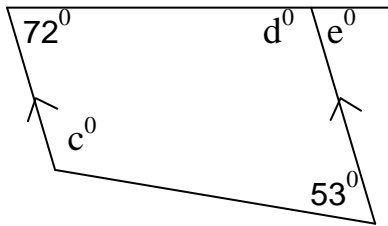


g = \_\_\_\_\_



h = \_\_\_\_\_

m)



c = \_\_\_\_\_

d = \_\_\_\_\_

e = \_\_\_\_\_

4. a)  $-12 - 5 =$  \_\_\_\_\_ b)  $-10 + 3 =$  \_\_\_\_\_ c)  $-6 \times 8 =$  \_\_\_\_\_

d)  $-30 \div -5 =$  \_\_\_\_\_ e)  $(-3)^2 =$  \_\_\_\_\_ f)  $16 + -3 \times 4 =$  \_\_\_\_\_

5. Simplify

a)  $13m - 5m + 2m =$  \_\_\_\_\_

b)  $7ak - 2k + 3ak - 5k =$  \_\_\_\_\_

6. Expand

a)  $4(7p - 3) =$  \_\_\_\_\_

b)  $3m(5m + 2) =$  \_\_\_\_\_

7. Convert

a)  $54\text{cm}^3 =$  \_\_\_\_\_ ml

b)  $2.5\text{km} =$  \_\_\_\_\_ m

c)  $3\frac{1}{4}\text{hrs} =$  \_\_\_\_\_ mins

8. Calculate

a) 34% of 85

b) 7.5% of \$370

c) Write  $\frac{34}{42}$  as a %

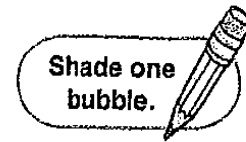
9. a)  $\frac{2}{3} + \frac{1}{7}$

b)  $3\frac{1}{2} + 1\frac{2}{5}$

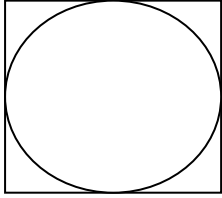
c)  $2\frac{4}{5} \times \frac{3}{7}$

d)  $\frac{5}{12} \div \frac{25}{18}$

## PART B – NAPLAN



1. Here is a circle with a radius of 5m enclosed by a square.  
What is the area of the square?



25m<sup>2</sup>

78m<sup>2</sup>

100m

100m<sup>2</sup>

2. I need to double the area of a rectangle. Which of the following ways will give me the correct answer

Increase both the length and width by 2cm

Double the length and width

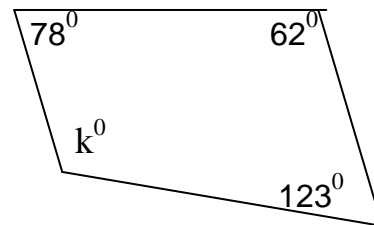
Double either the length or width

Double the perimeter

3. (Non-calculator)

What is the value of  $k$  in this diagram?

Answer



4. (Non-calculator)

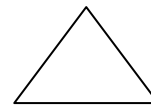
This triangle has 3 equal sides. All angles are equal to:

80°

90°

72°

60°



5. (Non-calculator)

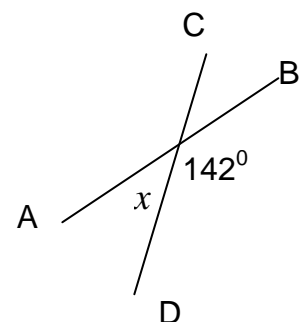
Straight lines AB and CD intersect. The value of angle  $x$  is:

38°

42°

48°

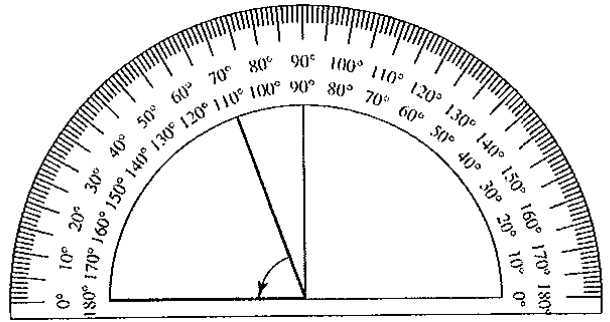
52°



**6. (Non-calculator)**

What is the measure of the marked angle?

Answer



7. The train departed from the station at exactly 2:40pm. The journey took 1.75 hours. At what time did the train arrive at the other station?

- 4:25pm       4:55pm       3:85pm

8. It took 5 hours to travel the total distance of 3175 km from Brisbane to Darwin. What was the average air speed of the plane?

- 635 km       635hrs       635km/km       635km/hr

**PART C – PROBLEM SOLVING**

Two numbers added to equal 1.  
The two numbers multiplied together to equal -72.  
What are the numbers?