

Year 7 Mathematics 2011

Percentages, Geometry and Time Test

Time allowed:

Total marks: 65

Name _____

Show your working for any question worth more than one mark.

1. Fill in the table below

Percentage	Decimal	Fraction (simplest form)
75%		
	0.4	
		$\frac{4}{5}$

[6]

2. Rachael has a bag of 50 lollies, she gives out 60% to her classmates. How many do her classmates get?

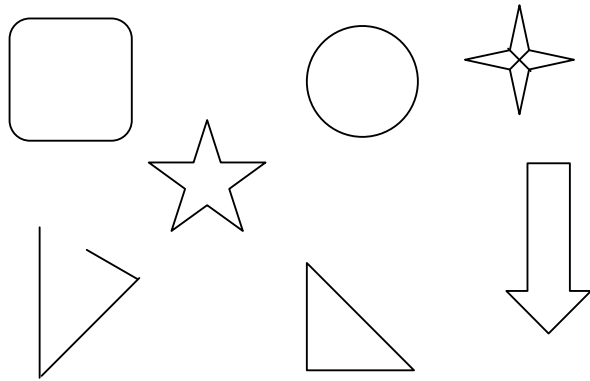
Answer (2) _____ [2]

3. Ngahua decides to spend her pocket money at the mall. She spends 20% of her money at Supre and then 50% of the remainder at Dotti. She finds that she only has \$30 left. How much money did she have to begin with?

Answer (3) _____ [3]

4. Circle all the polygons shown below:

[2]



5. Connect the polygon with the correct definition by drawing a line.

[3]

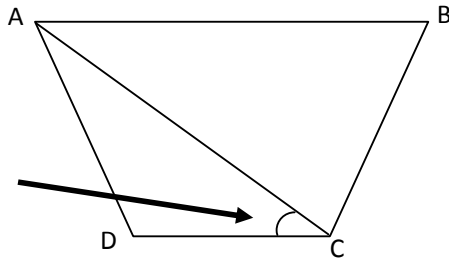
Decagon	A four sided polygon with one pair of parallel sides.
Pentagon	A seven-sided polygon.
Heptagon	A triangle with no sides or angles the same.
Trapezium	A five-sided polygon.
Rhombus	A four sided polygon with all sides equal and two pairs of parallel sides.
Scalene Triangle	A 10-sided polygon.

6. Draw a picture of a rectangle showing (Ensure you mark sides of equal length, parallel sides and angles) [2]

7. Draw an angle of 68° and state the type of angle

Answer (7) _____ [2]

8. Look at the diagram below and answer the following questions.



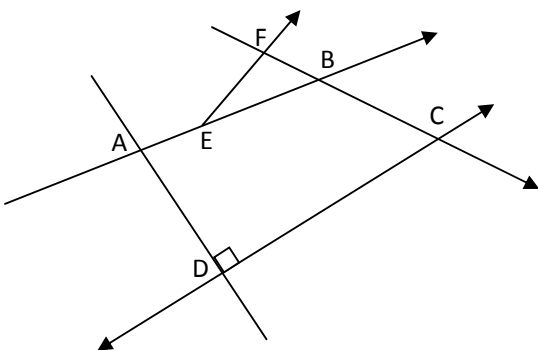
- (a) Using three point notation, name the angle shown Answer (a) _____ [1]
- (b) Measure the angle ADC and state what type of angle it is Answer (b) _____ [2]

9. Using your compass, draw a circle in the space provided, carefully labelling the centre O , the radius \overline{AO} , and the diameter \overline{BC} . [3]

10. Answer the following questions as True (T) or False (F) [5]

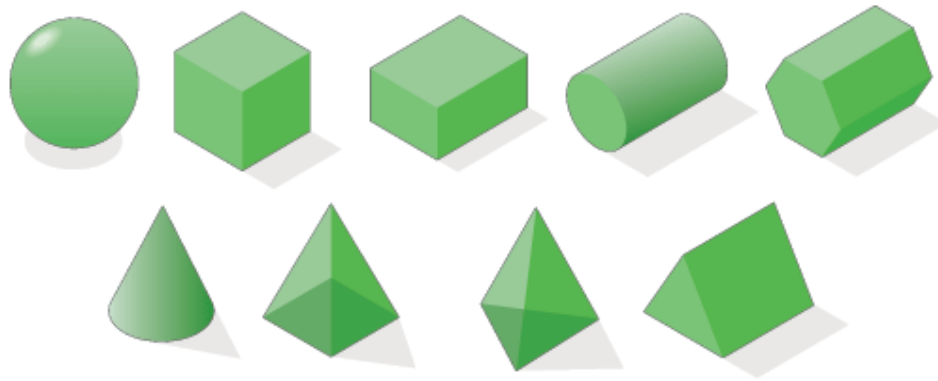
- (a) A rectangle is a parallelogram _____
- (b) A regular triangle is isosceles _____
- (c) A polygon can have a curved side _____
- (d) A regular quadrilateral is called a square _____
- (e) A rhombus is regular _____

11. Look at the diagram below and then answer the questions. [3]



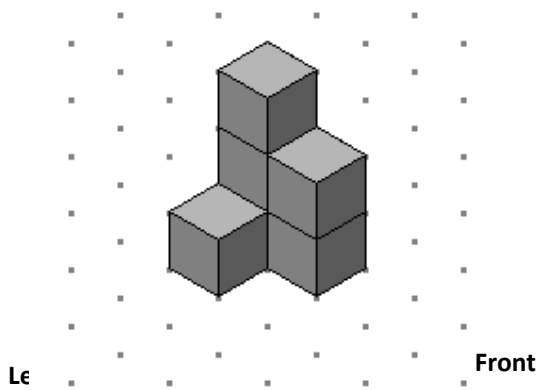
- a) Name a line _____
- b) Name the intersection of \overline{AB} and \overline{EF} _____
- c) \overline{AD} and \overline{DC} are _____

12. Answer the questions below about the solids shown:



- a) Name solid E _____ [1]
- b) Name solid F _____ [1]
- c) Which solid has only two faces? _____ [1]
- d) Which Solid has only two edges? _____ [1]
- e) Name the number of Edges, Vertices and Faces of Solid I
- Edges _____ [1]
- Vertices _____ [1]
- Faces _____ [1]
- f) Sketch the net of Solid C _____ [1]
- g) Sketch an Oblique view of Solid D _____ [1]

13. Draw the front, left and top view of the isometric solid shown



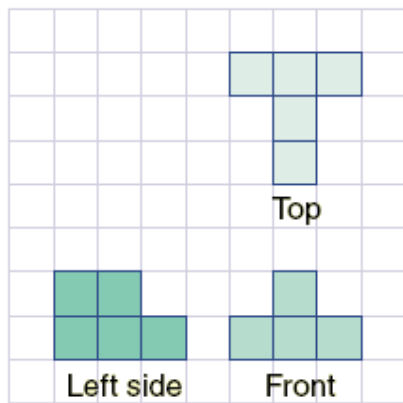
[3]

14. Draw an isometric projection of the following solid on the isometric grid below, the darker edge should be closer to you.



[2]

15. Determine the figure that would give the following views and draw the solid below:



[2]

16. Fill in the following questions on time.

- a) Rewrite 7:36 am in 24-Hour time. _____ [1]
- b) Rewrite 1840 hours in standard 12-Hour time. _____ [1]
- c) How many seconds in 7 minutes? _____ [1]
- d) Write the time shown on the clock in 24- hour time _____ [1]



Afternoon

17. Connect the words on the left with the correct definition

[2]

Leap Year
Decade
Fortnight
Century

10 Years
100 Years
366 Days
14 days

18. Study the Bus Timetable below and answer the corresponding questions.

Borough Green, Wrotham, West Kingsdown, Eynsford, Farningham to Swanley, Hextable, Dartford, Darent Valley Hospital																		
Mondays to Fridays																		
Service No.	408	419	419	408	422	419	408	419	408	408	418	418	407	409	408	408	408	408
Borough Green Station	..	..	..	09:15	..	..	11:15	..	13:15	..	15:30	15:15	..	..	..	..	17:15	18:15
Wrotham Square	..	..	..	09:20	..	..	11:20	..	13:20	..	15:37	15:22	15:57	..	..	..	17:20	18:20
West Kingsdown Portobello	06:15	07:15	07:15	09:30	09:30	10:00	11:30	12:30	13:30	14:30	..	..	16:05	..	16:05	16:05	17:30	18:30
Eynsford Rail Station	..	07:27	07:27	09:42	..	10:12	11:42	12:42	13:42	14:42	..	..	..	15:59	16:17	16:17	17:42	18:42
Farningham Village	06:21	07:31	07:31	09:46	09:39	10:16	11:46	12:46	13:46	14:46	..	..	..	16:03	16:21	16:21	17:46	18:46
Swanley Station	06:33	07:43	07:43	09:58	..	10:28	11:58	12:58	13:58	14:58	..	..	..	16:13	16:33	16:33	17:58	18:58
Azalea Drive	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hextable Green	..	07:55	07:55	..	..	10:35	..	13:05	..	..	..	..	..	16:28	..	..	..	..
Wilmington Post Office / Parsons Lane	..	08:00	08:00	..	..	10:40	..	13:10	..	..	..	..	..	16:33	..	..	..	..
Dartford Hythe Street	..	08:18	08:09	..	..	10:49	..	13:19	..	15:19	..	..	..	..	..	..	..	..
Darent Valley Hospital	..	08:28	08:19	..	..	10:59	..	13:29	..	15:29	..	..	..	..	..	..	..	..

- a) How many buses go from Borough Green Station to Eynsford Rail Station? _____ [1]
- b) Imogen gets to Wrotham Square at 11:00, what is the earliest time she can arrive at Farningham Village? _____ [1]
- c) Nichola catches the 14:30 bus from West Kingsdown Portobello, how long does it take her to arrive at Dartford Hythe Street? _____ [1]

19. Using the section of a calendar shown answer the following questions.

(a) Is the section of calendar from a leap year?

_____ [1]

(b) What day did the 31st of December of the previous year occur on?

_____ [1]

(c) What day does the last day of January occur on?

_____ [1]

JANUARY	
MO	31 | 3 10 17 24
TU	4 11 18 25
WE	5 12 19 26
TH	6 13 20 27
FR	7 14 21 28
SA	1 8 15 22 29
SU	2 9 16 23 30

FEBRUARY	
MO	7 14 21 28
TU	1 8 15 22
WE	2 9 16 23
TH	3 10 17 24
FR	4 11 18 25
SA	5 12 19 26
SU	6 13 20 27

20. Using the map of Australia shown determine the correct time in the following places.

- a) What would the time be in Western Australia (WA) if it is 3 pm in New South Wales (NSW)?

_____ [1]

- b) What would the time be in South Australia (SA) if it is 5 am in Western Australia (WA)?

_____ [1]

- c) The time in the Northern Territories (NT) is 1840 hours, what time is it in Victoria (VIC)? (Give your answer in 24 hour time)

_____ [1]

