SAMPLE ADMISSION TEST PAPER
SUBJECT: MATHEMATICS
CLASS: 9

Name: _____	Duration: 45 minutes
Date: _____	Marks: _____/20

1. Evaluate

(a) $\frac{1}{2} + \frac{2}{9}$,

Answer (*a*) .....[1]

(b) $\frac{2}{3} \div \frac{9}{11}$.

Answer (*b*) .....[1]

2.

(a) Calculate 5% of $280 000.

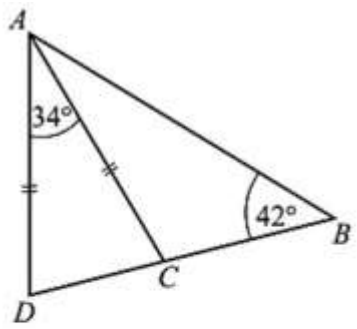
(b) A single carton of juice costs $4.20.
A special offer pack of 3 cartons costs $9.45.
Ali bought a special offer pack instead of 3 single cartons.

Calculate his percentage saving.

Answer (*a*) $.....[1]

(*b*) .....% [2]

3. In the diagram, BCD is a straight line.
$AD = AC$, $D\hat{A}C = 34°$ and $A\hat{B}C = 42°$.



Find

(a) $A\hat{D}C$,

(b) $B\hat{A}C$,

(c) the reflex angle ABC.

Answer *(a)* $A\hat{D}C$ = ...[1]

(b) $B\hat{A}C$ = ...[1]

(c) reflex $A\hat{B}C$ = ...[1]

4.

Expand and simplify.

$$(2c+9d)(4c-3d)$$

..... [2]

5.

(a) Solve $\frac{3x}{4} + \frac{2x-1}{2} = 3$.

Answer $x =$ ..... [2]

(b) Write as a single fraction in its simplest form

$$\frac{5}{x+4} + \frac{2}{x-1}.$$

Answer ..... [2]

6.



NOT TO SCALE

The area of the rectangle is $9\,cm^2$.
The area of the triangle is $85\,mm^2$.

Calculate the shaded area.
Give your answer in cm^2.

..... cm^2 [2]

7. .

(a) Express 96 as a product of its prime factors.

Answer ..... [1]

(b) 24 is a common factor of 96 and the integer n.

Given that n is less than 96, find the largest possible value of n.

Answer ..... [1]

8. **(a)** Evaluate $3\frac{1}{5} - 2\frac{3}{4}$.

(b) $\frac{2}{3}$ of a plot of land is garden.

$\frac{1}{5}$ of the garden is lawn.

Find the fraction of the plot of land which is lawn.

Answer (a) ..... [1]

(b) ..... [1]