

SWISS
INTERNATIONAL
SCIENTIFIC SCHOOL
— D U B A I —

Grade 10

MYP MATHEMATICS ASSESSMENT

Name :

Date :

ALLOTTED TIME : 60 MINUTES

NO CALCULATORS ALLOWED

Answer all the questions. Show your workings where appropriate.

Read the question and answer:

1. Simplify the following:

a) $\frac{1}{4} + \frac{2}{5}$

b) $-3x + 5x + 9x^2 - 7$

c) $\sqrt{25} \times 2 + 3 - 5$

d) $3(x + 5) - 9$

e) $(x - 2)(x + 4)$

f) $\frac{a^2b^3}{4} + \frac{10b^3}{3a^3}$

2. Evaluate the following when $x=2$ and $y=3$ and $z=-3$

a) $4x - 2y$

b) $3x^2$

c) $-3y^2 + 3x + z$

3. Solve for the unknown variable:

a) $3(x + 5) - 7 = 17$

b) $3x + y = 7$
 $5x + 2y = 5$

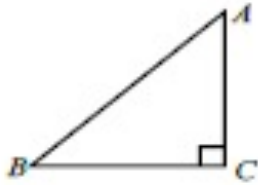
c) $\frac{x}{3} = \frac{4+x}{6}$

d) $x^2 - 8x + 12 = 0$

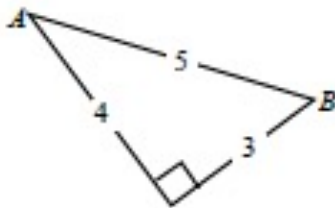
4. If a circle has an area of 36π , find the radius.



5. If $CA=6$ and $BA=10$, find the value of BC .



6. What is the value of $\sin A$ as a fraction?



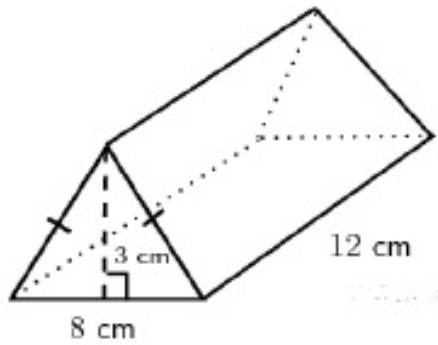
7. If 3, 11, 7, x , and 9 have a mean of 8, find x .

8. A fishing permit costs \$15, and an hour of fishing costs \$2.

a. Write an equation to represent the cost of fishing. Let C represent the cost of fishing and h represent the number of hours spent fishing.

b. Use this equation to calculate the total cost of 5 hours of fishing.

9. Find the volume of the following shape.



10. Given $f(x):7x-2$,

a. Calculate $f(5)$

b. Solve $f(x)=12$

Official use only:

Score out of 22	
%	