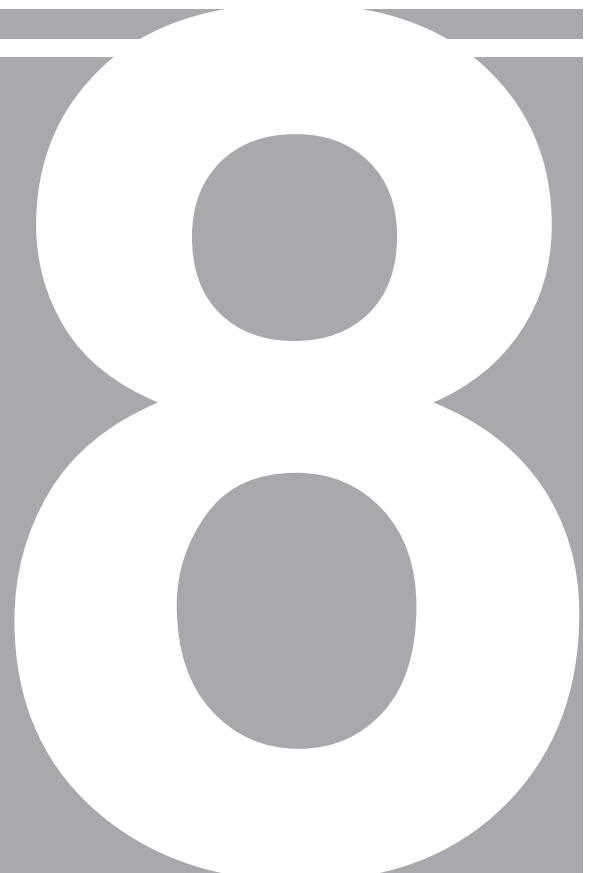


2013–2014

Nova Scotia Assessment

Mathematics

in Grade



Practice Form

- 1 Friday evening, 150 people attended a play at the theatre.
Saturday's audience represented 150% of Friday's attendance.

How many people attended the play on Saturday?

--	--	--	--

☐ ☐

<input type="radio"/> 0	<input type="radio"/> 0	<input type="radio"/> 0	<input type="radio"/> 0
<input type="radio"/> 1	<input type="radio"/> 1	<input type="radio"/> 1	<input type="radio"/> 1
<input type="radio"/> 2	<input type="radio"/> 2	<input type="radio"/> 2	<input type="radio"/> 2
<input type="radio"/> 3	<input type="radio"/> 3	<input type="radio"/> 3	<input type="radio"/> 3
<input type="radio"/> 4	<input type="radio"/> 4	<input type="radio"/> 4	<input type="radio"/> 4
<input type="radio"/> 5	<input type="radio"/> 5	<input type="radio"/> 5	<input type="radio"/> 5
<input type="radio"/> 6	<input type="radio"/> 6	<input type="radio"/> 6	<input type="radio"/> 6
<input type="radio"/> 7	<input type="radio"/> 7	<input type="radio"/> 7	<input type="radio"/> 7
<input type="radio"/> 8	<input type="radio"/> 8	<input type="radio"/> 8	<input type="radio"/> 8
<input type="radio"/> 9	<input type="radio"/> 9	<input type="radio"/> 9	<input type="radio"/> 9

- 2 If a square has an area of 121 cm^2 , what is the perimeter of the square?

- ☐ 11 cm
☐ 30.25 cm
☐ 44 cm
☐ 242 cm

- 3 Patrick earns \$61.50 when he works 6 hours a day at the corner store. One day, he worked 2 extra hours to earn more money.

How much will he earn for this day?

- ☐ \$20.50
- ☐ \$0.78
- ☐ \$82.00
- ☐ \$123.00

- 4 The price of a salad at the local restaurant increased from \$3.55 to \$4.05.

What is the percentage increase in the price of the salad?

- ☐ 14.08%
- ☐ 12.35%
- ☐ 1.14%
- ☐ 0.87%

- 5 Evaluate $2\frac{4}{5} \times \left(\frac{2}{3} + \frac{1}{3} \times \frac{1}{4}\right)$.

- ☐ $3\frac{11}{15}$
- ☐ $11\frac{1}{5}$
- ☐ $2\frac{1}{10}$
- ☐ $5\frac{3}{5}$

- 6 The temperature decreases by 3°C per hour for a total variation of -24°C .

How many hours are necessary to reach this variation?

- ☐ 8
- ☐ -8
- ☐ 27
- ☐ -27

- 7 Martin wants to rent a lawn mower. The table below shows the rental cost, c , in terms of the rental time, t , in hours.

rental time, t (h)	rental cost, c (\$)
1	32
2	40
3	48
4	56

Which of the following equations represents the relation between the rental cost, c , and the rental time, t ?

- ☐ $c = 8t + 32$
- ☐ $c = t + 32$
- ☐ $c = 8t + 24$
- ☐ $c = t + 24$

8

The science teacher has $2\frac{1}{2}$ cups of vinegar. In order to do an experiment, each student needs $\frac{1}{12}$ of a cup of vinegar. There are 32 students in the class.

How much **more** vinegar does the teacher need?

- ☐ $2\frac{2}{3}$ cups
- ☐ $\frac{1}{6}$ of a cup
- ☐ 3 cups
- ☐ 1 cup

9

Mr. Doolittle has pigs and ducks on his farm. If the total number of tails is 14 and the total number of legs is 38, how many ducks are on the farm?

Hint : If there are x ducks, there are $(14 - x)$ pigs.

--	--	--	--

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

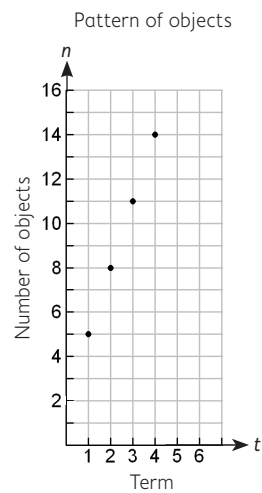
10 Solve the equation $6(x + 2) = 30$.

- ☐ $x = 22$
- ☐ $x = \frac{14}{3}$
- ☐ $x = 3$
- ☐ $x = 7$

11 The graph on the right represents the relation between the term, t , and the number of objects in the term, n .

Which of the following equations represents the data in the graph?

- ☐ $n = 3t$
- ☐ $t = 3n$
- ☐ $n = 3t + 2$
- ☐ $t = 3n + 2$



- 12 During a heavy snowfall, 8 cm of snow fell in 45 minutes.

How many centimetres of snow fell in 1 hour and 15 minutes? Round your answer to the nearest tenth.

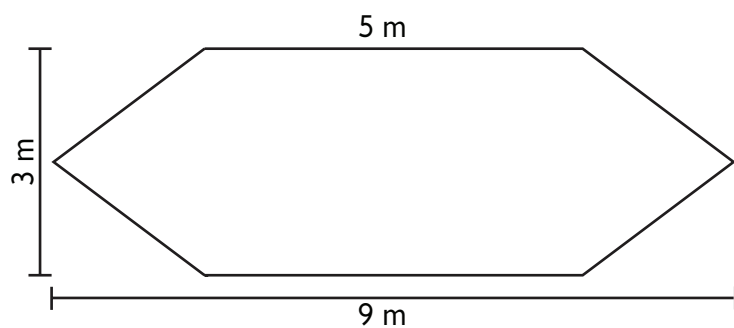
Note: assume the snow falls at a constant rate

--	--	--	--

 cm

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

- 13 Louic constructed a deck as illustrated below.



What is the area of his deck?

--	--	--	--	--

m²

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

- 14 Lori calculated that the circumference of her plate is 37.60 cm.

What is the radius of her plate? Round your answer to the nearest hundredth.

--	--	--	--

cm

.

0

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

- 15 What is the total surface area of the box below?
Round your answer to the nearest unit.



--	--	--	--

cm²

.

0

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

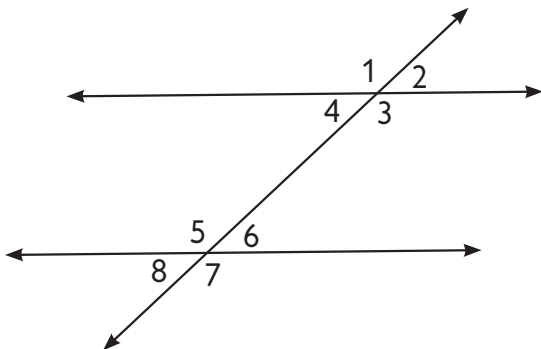
- 16 Alexis is mountain climbing with Joey. Alexis climbs a 12 m vertical rock face. Joey, who is standing 16 m from the base of the rock face, looks up at Alexis.

What is the distance between Alexis and Joey?

Hint: A diagram may help you.

- ☐ 12 m
- ☐ 16 m
- ☐ 20 m
- ☐ 28 m

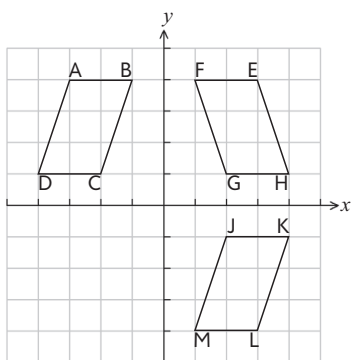
- 17 Look at the diagram below.



According to the diagram, angles 3 and 5 are:

- ☐ alternate-interior
- ☐ alternate-exterior
- ☐ corresponding
- ☐ supplementary

18 Examine the diagram below.



Which of the following statements is TRUE?

- ☐ Parallelogram JKLM is a reflection image of parallelogram ABCD.
- ☐ Parallelogram EFGH is a translation image of parallelogram ABCD.
- ☐ Parallelogram JKLM is a translation image of parallelogram EFGH.
- ☐ Parallelogram JKLM is a translation image of parallelogram ABCD..

19 If each data point in a data set is multiplied by x , which of the following statements will be true?

- ☐ The new mean will be x times the original mean.
- ☐ The range will not change.
- ☐ The new mean will be equal to the original mean divided by x .
- ☐ The new median will always be double the original median.

20

The table below summarizes the number of musicians in an orchestra who wear glasses.

	Men	Women	Total
Glasses	32	3	35
Without glasses	56	39	95
Total	88	42	130

If a member of the orchestra is chosen at random, what is the probability that the person wears glasses?

- ☐ 73%
- ☐ 68%
- ☐ 27%
- ☐ 32%