

2016 Algebra Practice test; outcomes E-1, E-2

1a) $3x - (-4) = -5$

1b) $\frac{x}{3} + 7 = 6$

2. create a 2 step Equation, Solve & Verify

3. write the equation / expression:

a) The quotient of triple a number plus 3 divided by 2 equals double that same number subtract one.

b) Seven increased by the product of five and a number

4. Calculate the cost of publishing school calendars for 75 staff if the company charges a flat fee of \$ 50.00 plus \$1.05 per calendar. Create an algebraic equation then solve & verify.

5.

Use substitution to complete the table of values for the equation: " $y = -2x - 3$ ".

x	-2	-1	0	1
y				

labelled

Create a dotted line graph & plot your solution

6. Use substitution to correctly complete the ordered pairs for the equation: " $y = 4x + 2$ "

$(-1,)$ $(, 2)$ $(1,)$ $(, 10)$

7.

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$$\begin{array}{c} * \\ *** \\ * \end{array}$$

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TERM 1

TERM 2

TERM 3

TERM 4

Given the diagrams above, use the term number & the number of stars to create a table of values up to the 4th term. Find the algebraic equation that works for all 4 terms & verify.

8.

The red river is 740 KM shorter than its parent river the Mississippi. The sum of their lengths is 1948 Km.

How long is each river?

Use an algebraic equation to solve and verify.

9. Jasmine is four years older than Jessica. The sum of their ages

is 32. How old is each girl?

10.

Describe each expression in words.

a) $\frac{n+2}{6}$

b) $5-9n$

c) $\frac{n}{2} + 5 = \frac{3n}{3}$

* For a bonus, solve 10c)