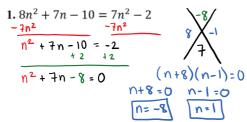
1.1-1.3 Review

Monday, September 10, 2018

10:39 AM

IM3 1.1-1.3 Review

Solve each equation by factoring.



Solve each equation.

3.
$$9^2 = \sqrt{11r - 7}^2$$

$$8| = ||r - 7|$$

$$+ \frac{7}{4} + \frac{17}{4}$$

$$8| = ||r|$$

$$r = 8$$

4.
$$\sqrt[4]{123} = \sqrt[4]{n+2}$$

$$123 = n+2$$

$$-2$$

$$121 = n$$

Solve each equation (must have same base).

5.
$$2^{-2n} = 2^{-3n-2}$$

 $-2n = -3n - 2$
 $+3n$
 $n = -2$

6.
$$5^{-2a+5} = 5^{3a}$$
 $-2a+5 = 3a$
 $+3a + 4a$
 $5 = 5a$
 $5 = 5a$

7. $6^{3k-3} = 216$
 $6^{3k-3} = 6^{3}$
 $3k-3 = 3$
 $3k = 6$
 $3k = 6$
 $3k = 6$

Perform the indicated operation.

8.
$$f(x) = 3(x) + 2$$
 and $g(x) = (x)^2 - 1$
Find $f(2) = 3(2) + 2$
 $= (6+2)$
Find $f(g(x)) = f(\chi^2 - 1)$
 $= 3(\chi^2 - 1) + 2$
 $= 3 \times 2 - 3 + 2$
 $f(g(x)) = 3 \times 2 - 1$

Find
$$g(f(x)) = 9(3x+2)$$

 $= (3x+2)^2 - 1$
 $= (3x+2)(3x+2) - 1$
 $= 9x^2 + 6x + 6x + 4 - 1$
9. $g(n) = 3(n) + 5$ and $f(n) = 2(n)^2 + 4(n)$

9x2+12×+3

Find
$$f(k^3) = 2(k^3)^2 + 4(k)^3$$

Find
$$g(f(n)) = g(2n^2 + 4n)$$

= $3(2n^2 + 4n) + 5$
= $(6n^2 + 12n + 5)$

Find f(g(n)).

$$f(g(n)) = f(3n+5)^{2} + 4(3n+5)$$

$$= \lambda(3n+5)^{2} + 4(3n+5)$$

$$= \lambda(9n^{2}+30n+25) + 12n+20$$

$$= |8n^{2}+60n+50+12n+20|$$

$$= |8n^{2}+72n+70|$$

Write the FIRST step you would take to solve for x.

10.
$$\sqrt[3]{4x+2} = 12^3$$
 Clibe
11. $x + 12 = 5$ Subtract 12
12: $\sqrt{x^3} = 27$ Clibe root
13. $\sqrt{(x+11)^2} = 8$ Square root or FOIL
14. $\frac{4x+1}{5} = 305$ mult. by 5
15. $3x = 12$ divide by 3

If you are reading this, draw your favorite emoji on the back of your quiz (you will receive 1 point EC toward the quiz). If I find out you shared this information with someone then you will lose 1 point on the

quiz.