

Topic 2 Review (Master)

Tuesday, November 16, 2021 11:07 AM

Math 2

Chapter 2 Practice Test

Name: _____ Per. _____

1) Put the expression in standard form: $10 - 8x^5 + 4x^3 - 2x$. $-8x^5 + 4x^3 - 2x + 10$

() + ()
() - ()
() ()

Simplify for numbers 2-9.

2) $(8x^3 + 5x - 9) + (3x^5 - 4x^2 - 4x + 12)$
 $3x^5 + 8x^3 - 4x^2 + x + 3$

3) $(12x^4 + 8x^2 - 12) + (2x^6 - 7x^2 + 10x - 2)$
 $2x^6 + 12x^4 + x^2 + 10x - 14$

4) $(5x - 3) - (4x^2 + 7x - 2)$
 $-4x^2 - 2x - 1$

5) $(-5x^2 - 4x) - (10) + (5x^2 - 8x + 3)$
 $-10x^2 + 4x - 13$

6) $(x+3)(x-7)$
 $x^2 - 4x - 21$

7) $(3x+4)(4x-2)$
 $12x^2 - 6x + 16x - 8$

8) $(2k-4)^2$
 $4k^2 - 16k + 16$

9) $(5x-1)(5x+1)$
 $25x^2 - 1$

Find the Greatest Common Factor for numbers 10-11.

10) $12y^5 + 9y^3 - 15y$
 $3y$

11) $10x^5 + 15x^3 - 20x^2$
 $5x^2$

x^2 - simple

Factor for numbers 12-23.

12) $x^2 + 9x + 20$
 $(x+4)(x+5)$

13) $x^2 - 8x - 9$
 $(x+1)(x-9)$

14) $x^2 + 5x - 14$
 $(x-2)(x+7)$

15) $x^2 - 18x + 80$
 $(x-8)(x-10)$

16) $x^2 + 12x + 36$
 $(x+6)^2$

17) $x^2 - 6x + 9$
 $(x-3)^2$

18) $5x^2 + 10x + 5$

$5(x^2 + 2x + 1)$

$5(x+1)(x+1)$

$5(x+1)^2$

$\begin{array}{c} 1 \\ \wedge \\ 1 \end{array}$

19) $4x^2 - 49$

$(2x-7)(2x+7)$

20) $x^2 - 25$

$(x-5)(x+5)$

21) $2x^3 + 16x^2 + 30x$

$2x(x^2 + 8x + 15)$

$\begin{array}{c} 15 \\ \wedge \\ 3 \end{array}$

$2x(x+3)(x+5)$

22) $(2x^2 - 4x)(x + 6x - 12)$

$\frac{2x(x-2)}{(2x+6)} \cdot \frac{6(x-2)}{(x-2)}$

$(2x+6)(x-2)$

$ax^2 \rightarrow$ grouping

23) $4x^2 + 13x + 3$

$\begin{array}{c} 12 \\ \wedge \\ 1 \end{array}$

$(4x^2 + x)(12x + 3)$

$x(4x+1) + 3(4x+1)$

$(x+3)(4x+1)$

24) $2x^2 - 7x - 15$

$\begin{array}{c} -30 \\ \wedge \\ 10 \end{array}$

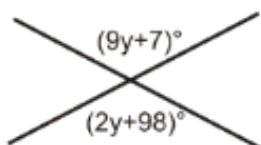
$(2x^2 + 3x)(10x - 15)$

$x(2x+3) - 5(2x+3)$

$(x-5)(2x+3)$

Review time 😊

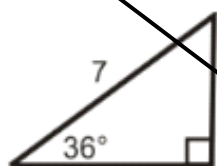
25) Solve for y.



$$\begin{array}{r} 9y+7 = 2y+98 \\ -2y \quad -7 \quad -2y \quad -7 \\ \hline 7y = 91 \end{array}$$

$y = \frac{91}{7} \quad y = 13$

26) Solve for y.

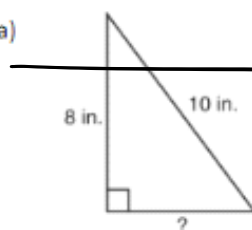


27) Solve for x.



28) Find the missing side.

a)



b)

