

Intro to Integrated
Exponents Test Review WorksheetName: Key

1. $(6xy^5)^0$
1

2. x^{-6}
 $\frac{1}{x^6}$

3. $\frac{1}{x^{-3}y^{-4}}$
 x^3y^4

4. x^5y^{-2}
 $\frac{x^5}{y^2}$

5. $(x^3)(5x^2)$
 $5x^5$

6. $(5x^2y)(6x^3y^5)$
 $30x^5y^6$

7. $(-7x^2y^3)(-2xy)$
 $14x^3y^4$

8. $(x^3y)(xy)$
 x^4y^2

9. $(5x)^2(4x)^0$
 $25x^2$

10. $(4x^3y^4)^2$
 $16x^6y^8$

11. $\frac{x^8}{x^8}$
1

12. $\frac{x^{12}}{x}$
 x^{11}

13. $\frac{16x^3}{10x^2}$
 $\frac{8x}{5}$

14. $\frac{49x^4}{7x}$
 $7x^3$

15. $\frac{9x^9yz^5}{72x^4y^7z^3}$
 $\frac{x^5z^2}{8y^6}$



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Bart ran 2 miles in 30 minutes.
 Roger ran 1 mile in 10 minutes. $\frac{10 \text{ min}}{60 \text{ min}} = \frac{1}{6} \text{ hour}$
 How much faster was Roger (1 mile = 5280 feet)

	d	r	t
B	2	r	$\frac{1}{2}$
R	1	r	$\frac{1}{6}$

$2 \cdot 2 = r \cdot \frac{1}{2} \cdot \frac{2}{1}$
 $4 = r$ Bart's speed
 $6 \cdot 1 = r \cdot \frac{1}{6} \cdot \frac{6}{1}$
 $6 = r$ Roger's speed

6 - 4 = 2 mph faster

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What is the largest of three consecutive positive integers if the sum of the smaller two integers is 11.

odd
 X - smallest 5
 X+1 - 2nd smallest 6
 X+2 - largest 7

$$\begin{aligned}
 X + X + 1 &= 11 \\
 2X + 1 &= 11 \\
 \underline{-1 \quad -1} & \\
 2X &= 10 \\
 X &= 5
 \end{aligned}$$

largest = 7