

Key

### Relay #1

Team member #1 completes problem #1. Team member #2 completed problem #2 and can correct problem #1 if he/she sees fit. This continues until team member #5 finishes and returns this sheet to the teacher to be checked. Good luck!

1.  $x^2 * x^5$

$$x^7$$

2.  $\frac{y^5}{y^2} = y^3$

3.  $(2x^3)^4$

$$2^4 x^{3 \cdot 4} = 16x^{12}$$

4.  $x^5 y^{-2} * x^1 y^7$

$$x^6 y^5$$

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

$$9x^4 y^4 z^2$$

Key

## Relay #2

Team member #1 completes problem #1. Team member #2 completed problem #2 and can correct problem #1 if he/she sees fit. This continues until team member #5 finishes and returns this sheet to the teacher to be checked. Good luck!

$$1. \frac{x^2y^3}{xy^5} \cdot \frac{x}{y^2}$$

$$2. \frac{6x^3y^2}{3y} \cdot 2x^3y$$

$$3. (3a^2b^3)^2 = 9a^4b^6$$

$$4. \frac{(-4r^2d)^2}{2r^2} = \frac{16r^4d^2}{2r^2} = 8r^2d^2$$

$$5. (x^2y^4)^{-3} = x^{-6}y^{-12}$$
$$= \frac{1}{x^6y^{12}}$$

### Relay #3

Team member #1 completes problem #1. Team member #2 completed problem #2 and can correct problem #1 if he/she sees fit. This continues until team member #5 finishes and returns this sheet to the teacher to be checked. Good luck!

$$\begin{aligned} 1. x^4 * (x^2)^3 &= x^4 \cdot x^6 \\ &= x^{10} \end{aligned}$$

$$2. y^3 * y * y^5 = y^9$$

$$3. (-3xy^3z^2)^2 = 9x^2y^6z^4$$

$$\begin{aligned} 4. (2a^7)(-4a)(-2a)^2 &= 2a^7 \cdot (-4a) \cdot 4a^2 \\ &= -32a^{10} \end{aligned}$$

$$\begin{aligned} 5. (2w^2)^4(3w^2b^2)^3 &= (16w^8)(27w^6b^6) \\ &= 432w^{14}b^6 \end{aligned}$$