Name : _____

Expanded Form & Exponential Form

T2S2

A) Express each of the following in expanded form.

1) $\left(\frac{2b}{3}\right)^9$ = _____

2) $(-3v)^6$ = _____

3) $\left(\frac{9}{5}\right)^4$ = _____

4) $(-4)^7$ = _____

5) $\left(-\frac{w}{8}\right)^5$ = _____

6) c^8 = _____

B) Express each of the fol

1) $(-3.2) \cdot (-3.2) \cdot ($ _____

2) $\frac{b}{6} \cdot \frac{b}{6} \cdot \frac{b}{6} \cdot \frac{b}{6}$ _____

3) $8 \cdot 8 \cdot 8 \cdot 8 \cdot$ _____

4) $\left(-\frac{7}{2}\right) \cdot \left(-\frac{7}{2}\right) \cdot \left(-\frac{7}{2}\right) \cdot \left(-\frac{7}{2}\right)$ = _____

5) $(-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x)$ = _____

6) $\frac{t}{4} \cdot \frac{t}{4}$ = _____

Name : _____

Answer key

Expanded Form & Exponential Form

T2S2

A) Express each of the following in expanded form.

1) $\left(\frac{2b}{3}\right)^9$ = $\frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3} \cdot \frac{2b}{3}$

2) $(-3v)^6$ = $(-3v) \cdot (-3v) \cdot (-3v) \cdot (-3v) \cdot (-3v) \cdot (-3v)$

3) $\left(\frac{9}{5}\right)^4$ = $\frac{9}{5} \cdot \frac{9}{5} \cdot \frac{9}{5} \cdot \frac{9}{5}$

4) $(-4)^7$ = _____ -4) • (-4)

5) $\left(-\frac{w}{8}\right)^5$ = _____ $-\frac{w}{8}\right)$

6) c^8 = _____ • c

B) Express each of the fol

1) (−3.2) • (−3.2) • ($(-3.2)^3$

2) $\frac{b}{6} \cdot \frac{b}{6} \cdot \frac{b}{6} \cdot \frac{b}{6}$ $\left(\frac{b}{6}\right)^5$

3) 8 • 8 • 8 • 8 • 8^8

4) $\left(-\frac{7}{2}\right) \cdot \left(-\frac{7}{2}\right) \cdot \left(-\frac{7}{2}\right) \cdot \left(-\frac{7}{2}\right)$ = $\left(-\frac{7}{2}\right)^4$

5) $(-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x) \cdot (-5x)$ = $(-5x)^7$

6) $\frac{t}{4} \cdot \frac{t}{4}$ = $\left(\frac{t}{4}\right)^2$