

Please work on the worksheet I gave you on your way in.

No groups.

Answers to 5.1-5.2 Practice (ID: 1)

1) $16x^3y^8$

2) $\frac{3v^7}{u^3}$

3) x^5

4) $24x^5y^5$

5) $8u^{12}v^4$

6) $\frac{x^3}{y^3}$

7) $\frac{2y^4}{x^4}$

8) $2u^7$

9) $\frac{x^{16}y^8}{81}$

10) $\frac{27v^3}{u^9}$

11) $\frac{9x^4}{y^6}$

12) a^4b^8

13) $\frac{a^8}{16b^{13}}$

14) $\frac{y^{32}}{4096x^{40}}$

15) $\frac{8y^{10}}{x^{11}}$

16) $\frac{2x^4}{y^6}$

17) $\frac{x^{16}}{y^{12}}$

18) $\frac{4v^{12}}{u^{14}}$

19) $\frac{16y^8}{x^{44}}$

20) $\frac{16}{x^8}$

21) $\frac{8}{x^3y^5}$

22) $\frac{1}{6b^6a}$

23) $12a^5b^5$

24) $\frac{x^3}{18y^4}$

25) $10x^2 - 4x - 32$

26) $12b^3 - 40b^2 + 10b + 28$

27) $32v^3 + 24v^2 + 4v - 30$

28) $14n^4 + 58n^3 + 82n^2 + 24n - 24$

29) $4n^4 + 5n + 15$

30) $7n^4 + 5n^2 + 8n + 6$

$$\frac{81p^6q^5}{(3^1p^2q)^2} =$$

$$\frac{81p^6q^5}{3^2p^4q^2}$$

$$\frac{81p^2q^3}{9} = 9p^2q^3$$

$$\left(\frac{-6x^6}{3x^3} \right)^{-2}$$

$$\left(-2x^3 \right)^{-2}$$

$$(-2)^{-2} \cdot x^{-6}$$

$$\frac{1}{(-2)^2 x^6}$$

$$\frac{1}{4x^6}$$

① $4^1 x^2 y^4 \cdot 4^1 x^2 y^4$

4^2

$$16 x^3 y^8$$

$$4^2 x^2 \cdot 4^5 x^5 = 4^7 x^2$$

$$4^2 \cdot 4^5 = 4^7$$

$$\textcircled{2} \quad u^{-1} v^4 \cdot 3^1 \cdot u^{-2} \cdot v^3$$

$$3 u^{-3} v^7 = \boxed{\frac{3 v^7}{u^3}}$$

$$\textcircled{9} \quad (3^1 x^{-4} y^{-2})^{-4}$$

$$3^{-4} x^{16} y^8$$

$$\frac{1}{81} \cdot x^{16} y^8 \quad \frac{x^{16} y^8}{3^4} = \boxed{\frac{x^{16} y^8}{81}}$$

$$3^{-4} = 0.0123456789$$

$$\textcircled{\frac{1}{81}}$$

$$\textcircled{10} (3^1 v^1 u^{-3})^3$$

$$3^3 v^3 u^{-9}$$

$$\frac{27v^3}{u^9}$$

$$\text{Ex. } (-5^1 x^1 y^{-2})^{-3}$$

$$(-5)^{-3} x^{-3} y^6$$

$$\frac{y^6}{(-5)^3 x^3}$$

$$\frac{y^6}{-125x^3}$$

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$$\left(\frac{2^1 x^3 y^{-3}}{xy} \right)^4$$

$$\left(\frac{2^{-3} x^{-9} y^9}{xy^1} \right)^4$$

$$\left(\frac{x^{-10} y^8}{2^3} \right)^4$$

$$\left(\frac{y^8}{x^{10} \cdot 2^3} \right)^4$$

$$\frac{y^{32}}{x^{40} 2^{12}}$$

$$\sqrt[4]{\frac{y^{32}}{4096x^{40}}}$$

⑮ $\frac{(\quad)^3}{(\quad)^2}$

$$\frac{2^3}{5^2} = \frac{8}{25}$$