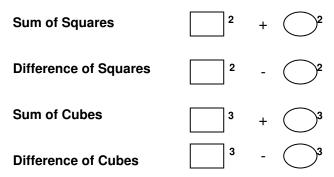
Strategy: Decide if BOTH terms are either perfect squares or perfect cubes. Then check if the form is one of the following:

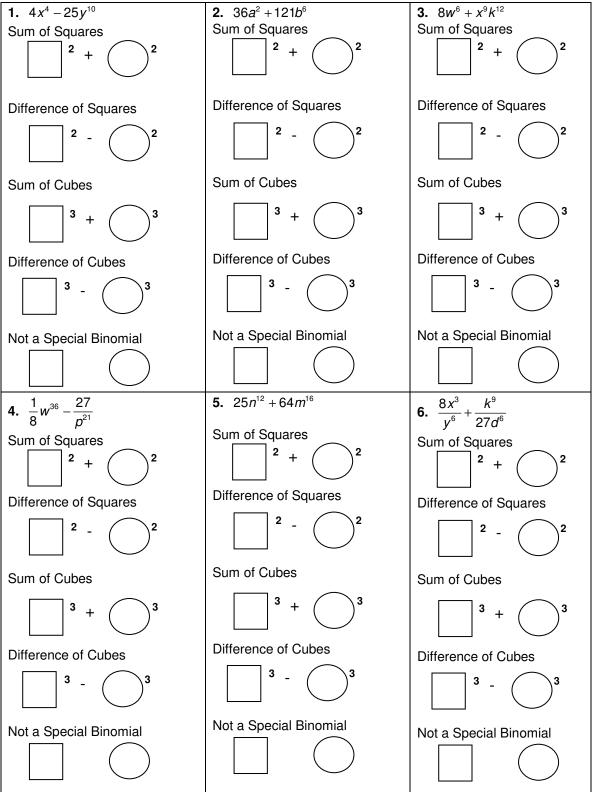


Examples

- 1. $8 x^{3} =$ 2 3 x^{3} 2. $y^{4} - 25 =$ y^{2} 2 - 5^{2} 3. $16a^{4} - b^{8} =$ $4a^{2}$ 2 - b^{4} 2 4. $\frac{1}{8}n^{3} - 64m^{6} =$ $\frac{1}{2}n^{3}$ + $4n^{2}$ 3
- 5. $\frac{4}{25}p^2 \frac{27}{64}w^3$ is NOT A SPECIAL BINOMIAL since it does NOT fit any of the 4 forms; the first term is a perfect square while the second term is a perfect cube

Intermediate Algebra Skill-Builder # PF – 9 Recognizing Special Binomials

Decide whether the given expression is a special binomial and write the answer in the correct form.



Intermediate Algebra Skill-Builder # PF – 9 Recognizing Special Binomials

Answers

1. difference of squares $(2x^2)^2 - (5y^5)^2$ 2. sum of squares $(6a)^2 + (11b^3)^2$ 3. sum of cubes $(2w^2)^3 + (x^3k^4)^3$ 4. difference of cubes $(\frac{1}{2}w^{12})^3 - (\frac{3}{p^7})^3$ 5. sum of squares $(5n^6)^2 + (8m^8)^2$ 6. sum of cubes $(\frac{2x}{y^2})^3 + (\frac{k^3}{3d^2})^3$