

## PROPERTIES OF EXPONENTS

Use the properties of exponents to simplify each expression. Match each correct answer to a letter and complete the riddle below.

1	$\frac{x^{12}}{x^6}$	2	$x^{10} \cdot x^2$
3	$(x^4)^5$	4	$(xy)^5$
5	$\frac{x^8 \cdot x^4}{x^3}$	6	$\frac{x^{10}}{x^2} \cdot x^6$
7	$(x^2y^2)^3$	8	$(x^6)^2 \cdot (x^3)^3 \cdot x$
9	$\frac{x^{24}}{(x^4)^2}$	10	$\frac{(xy)^7}{(x^2y^3)^2}$

I: $x^9$	E: $x^{12}$	R: $x^2$	D: $x^{18}$	E: $x^3y$	S: $x^{14}$
S: $x^{16}$	L: $x^{20}$	E: $x^6y^6$	O: $x^5y^5$	A: $x^{15}$	J: $x$
T: $x^3$	N: $xy^5$	C: $x^{22}$	S: $x^{16}$	U: $x^3y^2$	C: $x^6$

WHAT KINDS OF TRIANGLES ARE THE COLDEST?

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5      8      2      9      4      6      1      7      3      10      9