

Precalc notes

1. (a) x
(b) -4
(c) $\frac{3}{2}$
(d) $\sqrt{5}$
2. (a) $ab = ba$; associative property
(b) $a + (b + c) = (a + b) + c$; commutative property
(c) $a(b + c) = ab + ac$; Distributive property
3. (a) $A = \{x \mid x \in \mathbb{R} \mid 2 < x < 7\}$
(b) $(2, 7)$
4. (a) The symbol $|x|$ stands for the absolute value of the number x .
If x is not 0, then the sign of $|x|$ is always positive.
5. The distance between a and b on the real line is $d(a, b) = |a - b|$.
So the distance between -5 and 2 is 7 .
6. (a) yes
(b) yes
7. (a) ...
(b) ...