

Warm-Up 1

31. What is the value of $5 - 5 \times 5 + 5 \div 5$?

32	diagonals	How many diagonals are in a convex heptagon?
33		What is the first year after 2018 that is a palindrome?
34		A standard 52-card deck of playing cards includes four aces. What is the probability that two cards selected randomly, without replacement, will both be aces? Express your answer as a common fraction.
35		What is the value of $\sqrt{2\cdot 3\cdot 4\cdot 5\cdot 6\cdot 7\cdot 10}$? Express your answer in simplest radical form.
36	°F	The temperature dropped from 13 °F to -5 °F. How many degrees Fahrenheit is the absolute value of the change in temperature?
37		What is the value of 1 \times 2 + 3 \div 6 \times 5 - 4? Express your answer as a common fraction.
38		If $x \otimes y$ is defined as $x^2 - y^2$, what is the value of 3 \otimes (2 \otimes 1)?
39		If the digits 7, 8, 2, 3 and 0 are used, each exactly once, to form a three-digit positive integer and a two-digit positive integer that differ by exactly 288, what is the sum of the three-digit integer and the two-digit integer?
40	degrees	In rectangle ABCD, point P lies on side BC and point Q lies in the interior of the rectangle so that triangle APQ is equilateral. If the measure of angle PAB is 17 degrees, what is the measure of angle QPC?

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