

WHAT DO YOU GET WHEN YOU DIVIDE THE CIRCUMFERENCE OF A JACK O'LANTERN BY ITS DIAMETER?



- |                              |                             |
|------------------------------|-----------------------------|
| 1. $x(x+2) - 2(x+2)$         | 2. $25x^3 - 100x^2 - x + 4$ |
| 3. $x^3 - 9x^2 + 16x - 144$  | 4. $x^3 - 4x^2 - 4x + 16$   |
| 5. $x^3 - x^2 + 2x - 2$      | 6. $2x^3 - x^2 - 6x + 3$    |
| 7. $x^3 + 5x^2 - 5x - 25$    | 8. $6x^3 + 3x^2 - 2x - 1$   |
| 9. $8x^5 - 6x^2 + 12x^3 - 9$ |                             |

<b>P</b> $(x^2 - 3)(2x - 1)$	<b>U</b> $(x^2 + 16)(x - 9)$	<b>K</b> $(x + 2)(x - 2)(x - 4)$
<b>M</b> $(3x^2 - 1)(2x + 1)$	<b>I</b> $(5x - 1)(5x + 1)(x - 4)$	<b>P</b> $(x^2 + 2)(x - 1)$
<b>P</b> $(x^2 - 5)(x + 5)$	<b>I</b> $(x + 2)(x - 2)$	<b>N</b> $(2x^2 + 3)(4x^3 - 3)$

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6      3      8      7      4      1      9                      5      2

10. Solve the system using either elimination or substitution.
- $$\begin{aligned} x + 2y &= 12 \\ 3x - 5y &= 47 \end{aligned}$$

11. Given the function  $f(x)$  whose graph is shown, find  $f(2)$ .

