

Factor each completely.

1. $-48p^2q^5r - 42p^4q^3r^3$

$$-6p^2q^3r(8q^2 + 7p^2r^2)$$

2. $4m^2 - 5m - 21$

$$(4m + 7)(m - 3)$$

3. $k^2 + 10k - 24$

$$(k - 2)(k + 12)$$

4. $6c^3 + 6c^2 - 120c$

$$6c(c^2 + c - 20)$$

$$6c(c + 5)(c - 4)$$

5. Find the x-intercepts of this quadratic by factoring:

$$y = 2x^2 - 3x - 20 = (2x + 5)(x - 4)$$

x-int are +4 and -5/2

$$\begin{array}{c} -40 \\ -8 \end{array} \begin{array}{c} 5 \\ -3 \end{array}$$

	x	-4
2x	2x ²	-8x
+5	5x	-20