

6. Given  $u = -5 + 3x + 3x^2$  and  $q = 3 + 3x$ , which of the following is correct:

$$\frac{u+q}{u-q} = \frac{3x^2+6x-2}{3x^2+8}$$

$$u-q = 3x^2 - 2$$

$$u \times q = 3(x-1)(3x^2+3x-5)$$

$$u+q = 3x^2 + 6x - 8$$

$$u \times q = 3(x-1)(3x^2+3x+5)$$

$$u-q = 3x^2 + 8$$

$$\frac{u+q}{u-q} = \frac{3x^2+6x-8}{3x^2-8}$$

$$u+q = 3x^2 + 6x + 2$$

$$u+q = 3x^2 + 6x - 2$$

$$u \times q = 3(x+1)(3x^2+3x-5)$$

$$\frac{u+q}{u-q} = \frac{3x^2+6x-2}{3x^2-8}$$

$$u-q = 3x^2 - 8$$

$$u-q = 3x^2 + 2$$

$$u \times q = 3(x+1)(3x^2+3x+5)$$

$$\frac{u+q}{u-q} = \frac{3x^2+6x+2}{3x^2-8}$$

$$u+q = 3x^2 + 6x + 8$$

**Solution**