

- (1) Express the statement “ d is between 2 and 5” as an inequality.
- (2) Express the statement “ $d(x, 5)$ is greater than 3” as an inequality involving the absolute value symbol.
- (3) Replace the symbol \square in the following statement with either “=” or “ \neq ” to make the statement true:

$$\frac{4+3\sqrt{5}}{2} \square 2+3\sqrt{5}$$

(4) True or false: $-|-5| = 5$

(5) Simplify: $\left(\frac{1}{2}x^4\right)8x^3$

(6) Simplify: $2x^4 \cdot 5$

(7) Simplify: $-2x^4y \left(\frac{3xy^2}{4x^3}\right)$

(8) Simplify: $(3x + 2)^2$

(9) Simplify: $(3x + 2)^3$

(10) Factor $x^6 - 8$

(11) Factor $x^2 - 6x - 27$

(12) Factor $2x^2 - 7x + 6$