

1. Simplify:
$$20 + 4^3 \div (-8)$$

a) 4

c) 12

d) -10.5

2. Simplify:
$$(2a-4)+2(a-5)-3(a+1)$$

3. Evaluate the expression:
$$4a^2 - 4ab + b^2$$
 , when a = 2 and b = 5

$$= 16 - 40 + 25 = -24 + 25$$

- 4. Firefighters use the formula S = 0.5P + 26 to compute the horizontal range S in feet of water from a particular hose, where P is the nozzle pressure in pounds. Find the horizontal range if pressure is 90 lb.
- a) 44 feet

- b) 450 feet
- c) 19 feet

$$S = .5(90) + 26$$

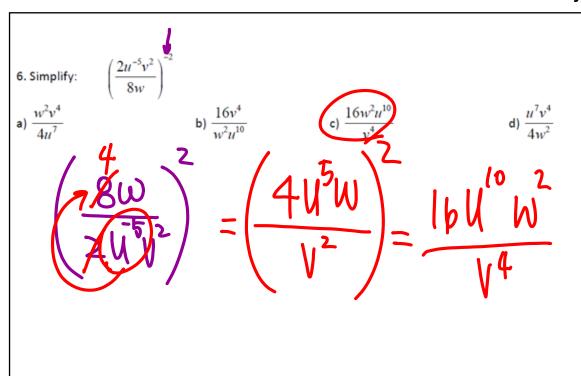
= $45 + 26 = 71$

- $2x^{2}\left(-3x^{2}\right)^{3}$ 5. Simplify:
- a) $54x^{12}$

- b) $18x^8$ c) $-18x^{12}$



$$2\chi^2\left(-27\chi^6\right) = -54\chi^8$$



7. Express in scientific notation: 0. 0000056

b)
$$5.6 \times 10^6$$

c)
$$5.6 \times 10^{-5}$$

d)
$$5.6 \times 10^{-7}$$

