

Name: _____

MATH 1500: Quiz 6.1-6.4

1. a) $-5 + (-21)$

b) $-8 - (-6)$

c) $-2\frac{1}{4} + 4\frac{3}{4}$

2. a) $-7(-5)$

b) $(-320) \div 8$

c) $72 \div (-4) \cdot (-3)$

3. a) $28 - 4 \cdot 3^2 \div 6$

b) $(13^2 + 18^2 + \sqrt{13^2 \cdot 18^2}) \left(\frac{4}{3}\right)$ (Round to the hundredth.)

4. The flow rate (in gallons per minute) of water from a $1\frac{1}{2}$ inch hose at 65 psi is calculated from the expression: $29.7 \cdot (1.5)^2 \sqrt{65}$ Find the flow rate to the nearest gallon per minute.

5. The fastest temperature drop in recorded history in the US occurred on January 10, 1911, in Rapid City, SD. Between 7 am and 7:15 am the temperature plummeted from 55°F to 8°F . To the nearest hundredth, what was the average temperature change per minute? Express as a signed number.

Bonus: Show your work to receive credit: -6^2