



Mathematics 52
Take-Home Quiz 2

Fall 2016

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Course ID: (27488) and (27501)

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Note: This quiz covers some problems from the real numbers operations and properties.

Problem 1 (8 points): Simplify the following mathematical expressions:

$$a. \frac{\sqrt[3]{125} + \left(\frac{15}{5}\right)}{\left(\frac{22}{2}\right) + |-20|}$$

$$b. \frac{\sqrt[5]{125} - |-23| + 64^{\frac{1}{2}}}{34 + \sqrt{100}}$$

a

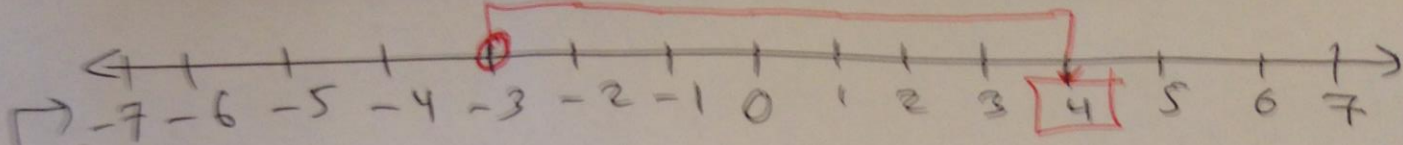
$$\frac{2^3 + \sqrt[3]{125} + \left(\frac{15}{5}\right)}{\left(\frac{22}{2}\right) + |-20|} = \frac{2^{\overset{3}{3}} + \sqrt[3]{125} + 3}{11 + 20} = \frac{8 + 5 + 3}{11 + 20}$$

$$= \frac{16}{31}$$

b

$$\frac{\sqrt[5]{125} - |-23| + 64^{\frac{1}{2}}}{34 + \sqrt{100}} = \frac{5 - 23 + 8}{34 + 10} = \frac{-10}{44} = \frac{-5}{22}$$

$\sqrt{64} = 8$



Problem 2 (5 points): Add the following using the number line:

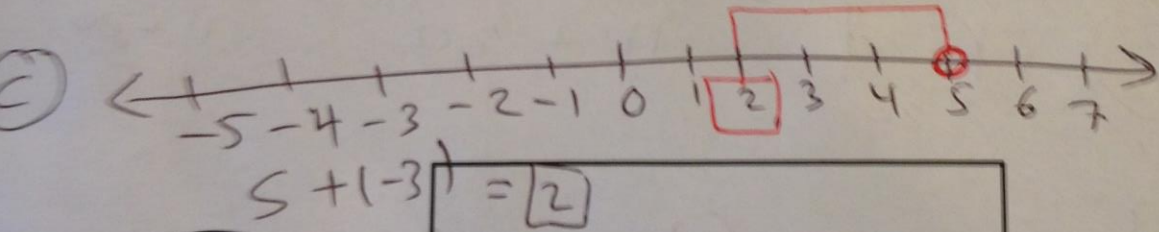
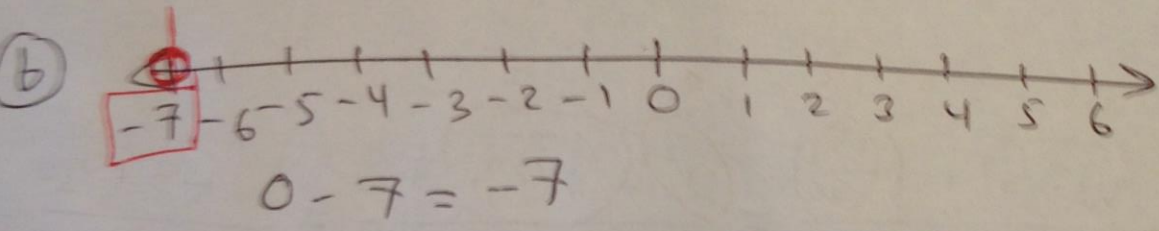
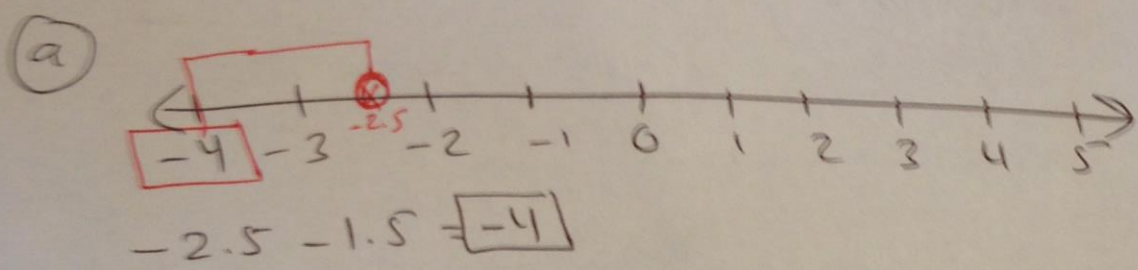
a. $-2.5 - 1.5 = \boxed{-4}$

b. $0 - 7 = \boxed{-7}$

c. $5 + (-3) = \boxed{2}$

d. $-((-3) \cdot (-1)) + -(-2 \cdot -1) = -(3) + -(2) = -3 + (-2) = \boxed{-5}$

e. $\frac{15}{-5} + (\frac{-14}{2}) = -3 + (-7) = \boxed{-10}$



Math is Awesome!!!
 Practice + Study = Success
 Good Luck
 Mohammed Kaabar

