



Mathematics 52
Take-Home Quiz 3
Fall 2016

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Course ID: (27488) and (27501)

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Note: This quiz covers some problems from solving linear inequalities.

Problem 1: Solve the following linear inequality:

$$12\beta + \sqrt[3]{125} < (-3.43)^0 + 2\beta$$

$$12\beta + 5 < 1 + 2\beta$$

$$12\beta - 2\beta < 1 - 5$$

$$10\beta < -4 \Rightarrow \beta < \frac{-4}{10} \Rightarrow \beta < \frac{-2}{5}$$

Solution

$$\boxed{\beta < \frac{-2}{5}}$$

Problem 2: Solve the following linear inequality:

$$-2\beta + 1^{\sqrt[3]{125}} < \left(-\frac{3.43}{-34.2}\right)^0 + 12\beta$$

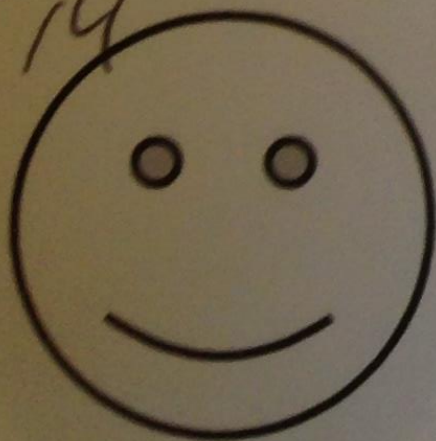
$$-2\beta + 1 < 1 + 12\beta$$

$$1 - 1 < 12\beta + 2\beta$$

$$\frac{0}{14} < \frac{14\beta}{14} \Rightarrow 0 < \beta$$

$$\boxed{0 < \beta}$$

Solution



Math has a great beauty that is the food for the soul.....Mohammed Kaabar

