Practice worksheet | Integers and rational numbers

Estimating square roots and recognising pi

Name: _____ Date: _____

6 questions | 14 marks

1. Place $\sqrt{35}$ between consecutive integers. [2 marks]

2. Place $\sqrt{70}$ between consecutive integers. [2 marks]

3. Use $3.4^2 = 11.56$ and $3.5^2 = 12.25$ to bound $\sqrt{12}$. [2 marks]

4. A circle has diameter 6 cm. Give its exact circumference, then use $\pi = 3.142$ to estimate it to two decimal places. [3 marks]

5. Explain why a measured circumference-to-diameter ratio of 3.14 does not prove π equals 3.14. [2 marks]

6. Which is larger: $\sqrt{26}$ or 5.1? Justify without finding the root. [3 marks]