Practice worksheet | Measurement and scale

The effect of rounding and repeated approximations

Name: _____ Date: _____

6 questions | 13 marks

1. Compare $7\times(1/7)$ exactly with 7×0.14. [2 marks]

2. Compare$(\sqrt{50})^2$ exactly with 7.07^2. [2 marks]

3. Calculate $4\times(2/3)$ exactly and compare with 4×0.67. [2 marks]

4. Find the circumference of an exact-radius 4 cm circle to 2 decimal places, rounding at the end. [2 marks]

5. Compare $100\sqrt{5}$ with 100×2.24, both to 2 decimal places. [2 marks]

6. A ruler gives 4.2 cm to the nearest 0.1 cm. Does reporting a derived area to 8 decimal places make that measurement more precise? [3 marks]