

7.G Circumference of a Circle

Task

a. Draw circles with diameters as indicated below and measure their circumferences to complete the following table.

| Diameter of Circle (inches) | Circumference of Circle (inches) | Circumference of Circle Diameter of Circle |
|-----------------------------|----------------------------------|---|
| 1 | | |
| 2 | | |
| 3 | | |
| $\frac{1}{2}$ | | |

b. The number π can be defined as the circumference of a circle with diameter 1 (unit). Using your knowledge about circles (that is, *without measuring*), complete the following table. Explain how you know the circumferences of the different circles.

| Diameter of Circle (inches) | Circumference of Circle (inches) | Circumference of Circle Diameter of Circle |
|-----------------------------|----------------------------------|---|
| 1 | π | π |
| 2 | | |
| 3 | | |
| $\frac{1}{2}$ | | |

c. How does the information in the two tables compare? Explain.





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