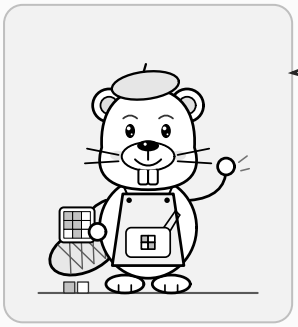
Name : _____ Date : _____

PAPILUMO / 4th Grade (ages 9–10) • Answer key

Mixed Numbers & Improper Fractions

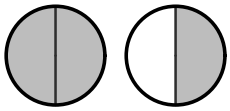
Read the shaded circles in each mosaic set and write both the mixed number and the equal improper fraction.



Tip: 1 whole circle = all its equal parts shaded (2/2, 3/3, 4/4…)

Mina the mosaic beaver sets out tiles: count wholes, then all shaded slices!

Worked example: 1 whole circle + 1/2 shaded circle

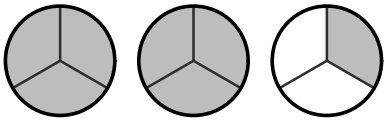


$1\frac{1}{2} = \frac{3}{2}$

Mixed number — Improper fraction

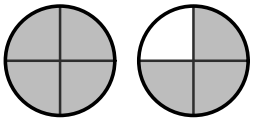
1. Write each circle group as a mixed number and as an improper fraction (A–F)

A Thirds mosaic



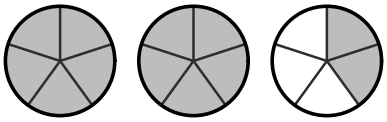
$2\frac{1}{3} = \frac{7}{3}$

B Quarters rosette



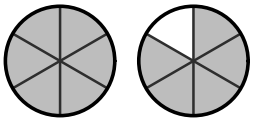
$1\frac{3}{4} = \frac{7}{4}$

C Fifths medallion



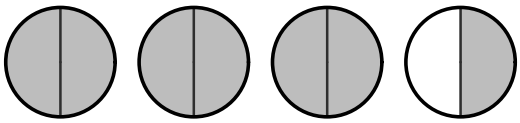
$2\frac{2}{5} = \frac{12}{5}$

D Sixths dial



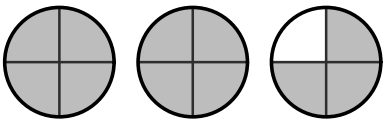
$1\frac{5}{6} = \frac{11}{6}$

E Halves tiling



$3\frac{1}{2} = \frac{7}{2}$

F Large quarters rosette



$2\frac{3}{4} = \frac{11}{4}$

Mina’s tip: keep the same denominator (parts in one circle); to check the improper numerator, multiply wholes × denominator + numerator.