Name: Due Date: Teacher: Parent Sign:

2. Estimate 0.48 x 12 by rounding before multiplying.

3. Estimate 7.93 x 6 by rounding to a convenient number.

4. Give a quick estimate for 3.26 x 49 (round one or both numbers).

5. Estimate 0.099 x 30 by rounding to a friendly number.

6. A box of nails weighs 12.4 kg. Estimate the weight of 6 boxes.

7. Estimate 5.67 x 8 by rounding first.

8. Estimate 0.34 x 27 using compatible rounding.

9. Estimate 99 x 0.08 by rounding one number.

10. Estimate 4.499 x 7 by rounding.

11-25: Multiplying decimals and whole numbers with visuals (visuals described)

11. A 10x10 hundred-grid shows 60 squares shaded (representing 0.60). If you have 8 identical grids, what total value do they show?

12. A strip model shows a piece of ribbon that is 0.4 m long. If you place 5 identical pieces end to end, what is the total length?

13. Base-ten picture: 3 flats and 7 tenths are shown (value 3.7). If you have 4 of these, what is the total?

14. A hundred-grid has 34 squares shaded (0.34). If you have 3 such grids, what is the total shaded amount?

15. A place-value picture shows 2 ones, 3 tenths, and 6 hundredths (2.36). If you have 3 identical pictures, what is the total?

16. A small juice box holds 0.25 L. If a class uses 12 juice boxes, how many liters of juice are used?

17. A bar model is 0.9 long (9 tenths). If 7 bars are lined up, what is the total length?

18. A small cube model shows 0.125 (one-eighth). If you have 8 such groups, what is the total?

19. A circle divided into 100 parts has 46 shaded (0.46). If you have 5 circles like this, what total is shaded?

20. A crate contains 0.8 kg of apples. If a farmer fills 15 crates, how many kilograms are there?

21. A hundred-grid has 4 squares shaded (0.04). If you have 60 such grids, what is the total?

22. A tape measure shows a line of 3.4 m. If 9 identical lines are drawn, what is the combined length?

23. A thousand-block model shows 75 thousandths (0.075). If you have 4 of these, what is the total?

24. A place-value diagram shows 3.205. If you have 6 such diagrams, what is the total?

25. A small tile represents 0.03. If there are 120 tiles, what total value do they represent?

26-40: Strategies for multiplying decimals and whole numbers (area model, partial products, place-value)

26. Use a place-value shift strategy to find 4.56 x 3.

27. Use partial products to calculate 6.24 x 12.

28. Use an area-model idea: compute 2.5 x 14 by breaking 2.5 into 2 + 0.5.

29. Break 0.75 x 24 into easier parts and find the product.

30. Use doubling strategy: compute 1.25 x 8.

31. Compute 0.4 x 25 using an easy strategy (think of 25 as $\frac{1}{4}$ of 100).

32. Use distributive reasoning: find 3.14 x 18 by breaking 18 into friendly parts.

33. Round 5.99 to a friendly number to estimate and then adjust to find the exact product with 7.

34. Use multiplying-by-10 then adjusting: compute 0.036 x 30.

35. Use known facts: compute 2.5 x 16 (think of quarter turns or scaling).

36. Compute 0.625 x 8 using a doubling or fraction strategy.

37. Multiply 12 x 0.089 using place-value thinking.

38. Decompose 0.47 x 35 into (0.47 x 30) + (0.47 x 5) and find the total.

39. Use area model: compute 7.2 x 15 by splitting 15 into 10 + 5.

40. Multiply 0.333 x 3 (recognize pattern or use standard multiplication).

41-50: Strategies for multiplying multi-digit decimals by whole numbers (multi-digit whole numbers)

41. Find 3.456 x 24 (use breaking into 20 + 4).

42. Find 12 x 4.789 by using place-value decomposition of 12.

43. Compute 0.563 x 125 (use 100 + 25 breakdown).

44. Calculate 7 x 5.6789.

45. Compute 0.0042 x 360 (use x36 then x10 or other strategy).

46. Find 25 x 0.92 using a strategy for multiplying by 25.

47. Compute 134 x 0.057.

48. Find 205 x 3.07 (use whole-number and decimal parts).

49. Compute 0.999 x 47 quickly using a subtraction idea (0.999 = 1 - 0.001).

50. Find 18 x 0.0364 using a friendly strategy (e.g., x20 then subtract x2).