4.1 #14	4.2 #14	4.2 #26
14. 0.025 A	14. 301,000 Hz	26. $4\frac{5}{8}$ mi
Accuracy: Significant digits = 2	Precision: 1,000 Hz Greatest Possible Error: 500 Hz	Precision: 1/8 mi Greatest Possible Error: 1/16 mi
4.5 #8	**4.5 #14**	**4.5 #30**
8. 15.2 km; 631.3 km; 20.0 km; 37.7 km	14. 4.9 kg; 670 kg; 0.043 kg	30. 120.5 cm; 16.4 cm; 1.417 m
Accurate: 631.3 km (4 sig figs) Precise: all have same precision	Accurate: all have same accuracy (2 sig figs) Precision: 670 kg is least precise	138.3 cm
4.5 #38	**4.5 #54**	**4.6 #4**
38. $\begin{array}{r} 16.41 \text{ oz} \\ \underline{11.372 \text{ oz}} \end{array}$ 5.04 oz	54. As part of an environmental science class, four families are selected to weigh their trash and recycling for a week using their bathroom scales, which have different precisions. The results are shown below in pounds: |	Trash	Recycle	Can/bottles for refund	Precision of scale
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Family 1	35.3	21.5	4.9	0.1 lb
Family 2	14.4	28.6	3.8	0.2 lb
Family 3	18.5	36.0	2.5	0.5 lb
Family 4	46	12	4	1 lb | Find the total amount of each and the percentage of material that was recycled and returned for refund. Family1 total: 61.7 pounds Family2total: 46.8 pounds Family3total: 87 pounds Family4total: 62 pounds Trash total: 114.2 pounds Recycletotal: 98.1 pounds Refundtotal: 15.2 pounds percentFam1recycle: 35% percentFam2 recycle: 61% percentFam3 recycle: 41% percentFam4recycle: 19% percentFam1refund: 8% percentFam2refund: 8% percentFam3refund: 3% percentFam4refund: 6%	4. (2.4 A)(3600 Ω) 8640 V or ~8600 V
4.6 #14	**4.6 #24**	**4.7 #18**
14. 360 ft² ÷ 12 ft $3\bar{0}\, ft$	24. $\dfrac{(19 \text{ kg})(3.0 \text{ m/s})^2}{2.46 \text{ m}}$ 210 kg m /s²	18. 4 lb 13 oz Precision: 1 oz Greatest possible error: 0.5 oz Relative error: 0.00649 Percent error: 0.65%