Mathematics Revision Week B

Wednesday

Joe Trella, Fraction Fella

JOE: Welcome back, everyone. You're listening to 99 $\frac{1}{2}$ WFRA, the home of Talk Fraction Radio. I'm Joe Trella, the Fraction Fella. OK, let's go to the phones. Betty, you're on Line 2.

BETTY: Hi Joe. Love your show. I listen to it *half* the time.

JOE: Half the time? Why only half?

BETTY: Sorry, Joe. I was just joking, see. "Half" is a fraction. Get it?

JOE: I get it, Betty. What's your problem?

BETTY: It's my 14-year old daughter, Dora Mae. Whenever I give her a mixed number, like 2 $\frac{2}{3}$, she turns it into an improper fraction. You know the type. Where the top number is bigger than the bottom. Like $\frac{8}{3}$. She thinks it's funny.

JOE: Hey, I used to do the same thing when I was a kid.

BETTY: You did?

JOE: Sure. You know what you ought to do? Use reverse psychology. Give Dora Mae some improper fractions, and make her think you want her to keep 'em that way. I bet she'll turn 'em right into mixed numbers.

BETTY: Great idea, Joe. Hey, thanks a lot.

CHANGING IMPROPER FRACTIONS TO MIXED NUMBERS

To write $\frac{7}{5}$ as a mixed number:

1. Divide the bottom (denominator) into the top (numerator).

$$5\overline{)7}^{1\ R\ 2}$$

2. Write the remainder as a fraction with the same denominator.

$$1\ R\ 2 \rightarrow 1\frac{2}{5}$$

Write these improper fractions as mixed numbers.

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

2. $\frac{5}{3}$ = _____

3. $\frac{7}{4}$ = _____

4. $\frac{9}{2}$ = _____

5. $\frac{14}{5}$ = _____

6. $\frac{16}{5}$ = _____

7. $\frac{25}{8}$ = _____

8. $\frac{35}{6}$ = _____

9. $\frac{57}{10}$ = _____

10. $\frac{91}{15}$ = _____

JOE: Let's go to Al on Line 4. Hello, Big Al.

AL: Hello, Joe. Love your show. So anyway, what's the deal with improper fractions?

JOE: What do you mean?

AL: When I change an improper fraction to a mixed number—sometimes I find it's not in simplest form. Is this normal?

JOE: Relax, big guy. You know what my Uncle Roy used to say to me? If you need to change to sim-plest form, then go ahead and change to simplest form.

AL: Is that all there is to it, Joe?

JOE: You bet. Here's what you should do. Try writing these improper fractions as mixed numbers. Then, if they're not in simplest form, change 'em to simplest form. You'll feel much better. I promise ya.

AL: Hey, thanks Joe. These improper fractions look great. They really do. I'm gonna try 'em as soon as I hang up.

Write these improper fractions as mixed numbers. Make sure they're in simplest form.

11. $\frac{8}{6}$ = _____

12. $\frac{12}{8}$ = _____

13. $\frac{12}{3}$ = _____

14. $\frac{21}{9}$ = _____

15. $\frac{30}{12}$ = _____

16. $\frac{13}{7}$ = _____

17. $\frac{45}{36}$ = _____

18. $\frac{60}{48}$ = _____

19. $\frac{100}{24}$ = _____

20. $\frac{88}{16}$ = _____

JOE: Let's go to Pauline on Line 5.

PAULINE: Hi, Joe. It's my little brother, Danny. He's 10. Every time he sees an improper fraction, it's like he NEEDS to turn it into a mixed number.

JOE: Relax, Pauline. I think I know someone your little brother would like to meet. Her name is Dora Mae.

PAULINE: Oh, wow, Joe. That's sounds great.

JOE: So this is what you do. Have your brother turn these mixed numbers into improper fractions. And I'll see about getting him together with Dora Mae.

PAULINE: Thanks, Joe. I think my little brother's really going to like these fractions.

JOE: Not as much as he's gonna like Dora Mae.

PAULINE: You're probably right, Joe.

JOE: When it comes to fractions, Pauline, I'm always right! Anyway, that's about all we have time for. Goodnight, everyone!

ONE WAY TO DO IT

CHANGING IMPROPER FRACTIONS TO MIXED NUMBERS

To change $2\frac{2}{3}$ to an improper fraction:

1. Multiply the whole number by the bottom (denominator) of the fraction.

$$2 \frac{1}{3} \rightarrow 6$$

2. Add the top (numerator) of the fraction to that product.

$$2 \frac{1}{3} \rightarrow 6 + 1 \rightarrow \frac{7}{3}$$

3. Write the improper fraction with the same denominator.

Write these mixed numbers as improper fractions.

21. $1\frac{1}{2} =$ _____   26. $4\frac{5}{6} =$ _____

22. $2\frac{2}{3} =$ _____   27. $10\frac{1}{3} =$ _____

23. $3\frac{2}{5} =$ _____   28. $8\frac{3}{7} =$ _____

24. $4\frac{1}{2} =$ _____   29. $12\frac{1}{6} =$ _____

25. $2\frac{5}{8} =$ _____   30. $40\frac{2}{3} =$ _____

THE TREE starring Rowena Pig and Itchy Squirrel

What's the easiest way to pick an apple from the top of this tree?

I don't know. Use a ladder?

100 ft TREE

No. Chop down the tree. Get it?

Uh-huh. I think you're going to get it, too.

BONK!

Yow!

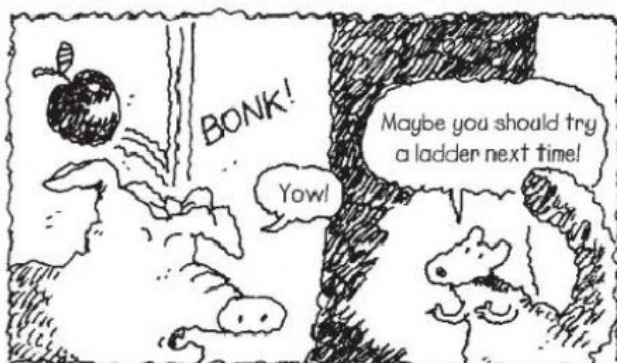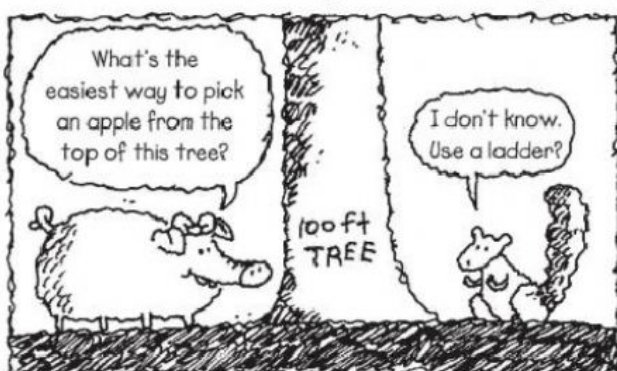**Maybe you should try a ladder next time!**

FIGURE IT OUT!

1. The apple that hit Rowena Pig fell from a branch that is 30 feet above the ground. How far is the branch from the top of the 100-foot tree?

_____

2. Rowena's ladder reaches up to 50 feet. How many feet shorter is the ladder than the 100-foot tree?

_____

3. Starting on the ground, Itchy Squirrel climbs 20 feet up the tree. Then she stops to rest. She climbs 37 feet more and stops to rest again. How many feet did Itchy climb up the tree?

_____

4. Rowena climbs 47 feet up the tree. Then an apple falls on her. The apple fell from a branch that is 92 feet up the tree. How many feet did the apple drop before hitting Rowena?

_____

5. Itchy climbs 57 feet up the 100-foot tree. Then she climbs down 28 feet. How many feet is she from the top of the tree?

_____

SUPER CHALLENGE: Itchy is 20 feet from the top of the 100-foot tree. She jumps straight across to a second tree. Now she's 30 feet from the top of the second tree. How tall is the second tree?